

THE RAILWAY GAZETTE
A Journal of Management, Engineering and Operation
INCORPORATING
Railway Engineer • TRANSPORT • The Railway News
The Railway Times • Herapath's Railway Journal • RAILWAY RECORD.
RAILWAYS • ESTABLISHED 1835 • THE RAILWAY OFFICIAL GAZETTE

PUBLISHED EVERY FRIDAY

AT

33, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1

Telegraphic Address: "TRAZETTE PARL., LONDON"

Telephone No.: WHITEHALL 9233 (12 lines)

Branch Offices:

GLASGOW: 87, UNION STREET

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BIRMINGHAM: 81, EDMUND STREET

Telephone: Central 3049

Annual subscription payable in advance and postage free

British Isles and Abroad £2 5s. 0d.

Single Copies One Shilling

Registered at the General Post Office, London, as a Newspaper

VOL. 89 No. 22

FRIDAY, NOVEMBER 26, 1948

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DIESEL RAILWAY TRACTION

The December issue of this RAILWAY GAZETTE publication, illustrating and describing developments in Diesel Railway Traction, will be ready on December 1, price 2s.

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THE RAILWAY GAZETTE

33, TOTHILL STREET, WESTMINSTER, S.W.1.

Steel Bill Guillotine Motion

SOUND arguments against the nationalisation of steel were raised by Sir Andrew Duncan on the final day of the debate on the Iron & Steel Bill in the House of Commons last week, when the Bill passed its second reading. Sir Andrew Duncan maintained that the Bill would do great damage to the progress of the development plan in which the industry is engaged, and which aims at meeting a steel demand of 18 million tons in the next few years. State control of steel, moreover, would split the industry into sections, cutting across industrial and Governmental machinery which had been built up for its more efficient functioning. Should there be any defects in the industry itself, these should be ventilated and cured, but in the face of the successful functioning of the industry, which had shown a steadily increasing output for many years, nothing could justify such a gamble. Though the Government might claim to have a mandate for the nationalisation of iron and steel, there certainly was no mandate for a venture into a new range of complex industrial activity, which was what the Bill meant. On Tuesday the Government decided to fix a time limit for the committee and report stages.

British Transport Records

The 16th annual conference of the British Records Association was held in the Stationers Hall, London, on November 16 and 17. Much of the business was concerned with matters outside the sphere of transport, and dealt with such aspects as the physical preservation of documents, but at a discussion meeting on the afternoon of November 17, when the subject was "Legislation and Records," attention was given to the preservation of historical material by our nationalised industries. Mr. G. Royde Smith, Secretary of the London Midland & Scottish Railway Company, outlined the position of the British Transport Commission, and the care which was being exercised. In connection with the conference a small exhibition was held, to which the B.T.C. contributed some magnificent parchments (early railway subscription lists, construction contracts, and so forth), and other items of outstanding interest. We feel that members of this Association, which is under the presidency of the Master of the Rolls, were satisfied as a result of what was said and exhibited that the B.T.C. is alive to the historical responsibilities of its trusteeship.

Integration of British Transport

On November 15, Sir Joseph Nall made some remarks, after Sir Cyril Hurcomb's address to the Institute of Transport, which were provocative of thought. A full note of the speech will be found on page 618 of this issue. We would draw special attention to the proposal that there should be one authority, with district representatives throughout the country, to deal with freight traffic, and a second authority to handle passenger traffic. Such an organisation would result in prompt decisions on matters concerning two or more types of transport, but there would be obvious difficulties in giving complete control of freight to the Road Executive and equally strong objections to handing all passenger business over to the Railway Executive. There is force in Sir Joseph Nall's criticism of the existing system of carrying parcels traffic by passenger train services. Probably a change in the present methods will be one of the numerous questions which will be considered in settling charges schemes in accordance with Part V of the Transport Act, 1947, but Sir Joseph Nall raised the subject at an opportune time. More plain speaking on the part of members of the Institute would be helpful during the present stage of transition from private to State ownership.

London Traffic Problem

Traffic congestion in the main London thoroughfares has become an increasingly difficult problem in recent years and, although a long-term solution is bound up with large-scale road improvement works, the most immediate effective measure, said the Minister of Transport at a press conference on November 17, was to prevent indiscriminate parking and reduce to a minimum the number of vehicles waiting in busy streets. As a result, Orders were introduced last year which

placed restrictions on waiting vehicles, street trading, and slow-moving traffic, and, as we pointed out at the time, would involve railway collection-and-delivery services. Further restrictions were brought into force in the City at a later date and have now been followed by similar measures in the Central London area and 34 local authorities, which became effective on November 22. The effect of the recent measures will be to increase the present mileage of "No Waiting" streets in the Central Area from 10 to 17 and to create, on the aggregate, an additional 26 miles in the outer areas. Mr. Barnes said that as a result of measures in the West End, the flow of traffic had been improved; on trial runs, journey times had been cut by an average of 10 per cent., and there had been an improvement in the running of buses and coaches.

* * * *

Overseas Railway Traffics

Substantial increases in Paraguay Central traffics, which have brought the aggregate gross receipts up to G755,324 above those for last year, continued in the fortnight ended November 12, when receipts of G92,602 and G98,354 gave a combined advancement of G47,022. The decline in Leopoldina traffics appears to have been arrested, and in the two weeks under review, there have been increases of £3,167 and £1,311; the aggregate for 45 weeks, however, is £479,096 below 1947, at £2,545,171. In the week ended November 7, one day's holiday on the Chilean Section of the Antofagasta (Chili) and Bolivia, and two days' holiday on the Bolivian Section, probably were responsible for a decline of £2,472, at £53,000, though there was a further slight setback in the second week, when traffics at £53,060 were down by £4,142. Since January 1, Antofagasta receipts amount to a total of £2,502,240 and are still £504,618 above those for last year.

* * * *

Anglo-Scottish Train Services

In a recent article in *The Scotsman*, Sir Eustace Missenden, Chairman of the Railway Executive, dealt with criticisms of the Anglo-Scottish train services. He emphasised that the abnormal conditions prevailing necessitated the concentration of London-Edinburgh traffic on the East Coast route, and that it was impossible to provide additional services on the West Coast and Waverley routes. The lack of through sleeping cars on the West Coast route to Edinburgh arose from the serious shortage of rolling stock, and the need to pay regard to the requirements of Scotland as a whole. It would be a complete misconception if it was thought that the shortcomings of the railway service were peculiar to Scotland or had been brought about by any failure of the Railway Executive to give full consideration to Scottish claims and interests. Never before in their history have the railways of Scotland been so closely integrated, nor in the past 25 years have they been managed to such an extent from within Scotland as they are today. There are signs that conditions are improving, and if progress can be maintained, the Scottish travelling public can rest assured that all possible consideration will be given to its needs.

* * * *

Tilling Provincial Buses for London

At a Press conference last Tuesday, Lord Latham, Chairman of the London Transport Executive, announced that negotiations had just been completed for the hire to London Transport for about a year of 200 new double-deck buses that had been manufactured for provincial undertakings of the Tilling Group, and were destined eventually for many different areas, including the West of England, the North of England, and parts of Wales and southern England. These would go straight from the factories in their provincial liveries, and a large proportion would be green. Lord Latham said that the recent acquisition of the Tilling interests by the British Transport Commission had made it possible to agree where the immediate needs were most acute and urgent, and to divert these buses to London in consequence. The provincial undertakings would have to carry on a little longer with some of their old buses. The first of the new buses will be running on the streets early in December. Most of the 200 are of the "low-bridge" type, which is not ideal for London conditions, by reason of the restricted head-room over the seats, but, as

the volume of travel on buses and trams is 40 per cent. above pre-war—an unprecedented increase—and the total vehicle fleet is only a little over 2 per cent. more than in 1939, urgent steps are necessary. The 550 hired coaches at present working in London will continue in service. Lord Latham concluded that he expected the 1948 new deliveries to be just under 800 buses, and that the 1949 allocation of double-deckers might be nearly twice that.

* * * *

Standardising Engineering Products

At a press conference on November 22, Mr. G. R. Strauss, Minister of Supply, spoke of the measures being taken to promote standardisation in industry in the interests of increased productivity and economy in stocks. It is proposed to set up a committee of engineering experts who will consult with the British Standards Institution and the makers of the products concerned to determine how the reduction of varieties in engineering production may be achieved without hampering any vital activities of the industry. Mr. Strauss emphasised that the investigations would be of a long-term nature and that there would be no fettering of research or limiting of the scope of engineering products. Standardisation would be introduced only where it would be really useful, and the special needs of the export market might restrict the extent of simplification. The Ministry of Supply itself already had greatly influenced industrial standardisation and had laid down standards for Services equipment which induced industrial organisations to adopt similar methods. In other directions, also, the Ministry had drawn the attention of manufacturers and buyers to the advantages of standardisation, and, in the heavy electrical industry particularly, some considerable standardisation had been effected. The work of the new committee, of which Sir Ernest Lemon, former Vice-President (Operating & Commercial) of the L.M.S.R., has been appointed Chairman, should make industry still more "simplification conscious."

* * * *

A New Steel Distribution Scheme

New arrangements for simplifying the procedure whereby small firms are authorised to obtain steel supplies also were outlined by the Minister of Supply. They will apply to nearly all firms which use under 25 tons of steel a quarter and have a total consumption of not more than ten tons of steel sheets. It has been found that too much time, work, and paper are being used in controlling the allocation of a relatively small amount of steel to a large number of consumers. When the scheme comes into force on January 1 next, eligible firms will be able to apply for authorisations on a single application form, addressed to the Ministry of Supply Regional Office for their area. The issue of such a form carries no automatic guarantee, however, that steel of the type required will be available. At the same time, iron castings have been taken "off the ration" and about two thousand foundries, producing three million tons of castings a year, will be relieved of much paper-work. Scrap and pig-iron in iron castings production and export of castings will remain subject to control.

* * * *

Wagon Capping

It is only too evident by observation of passing goods trains and wagons standing in sidings, that the iron capping which lines the topmost planks of railway wagons is a real problem. A great proportion of wagons is seen to have the capping distorted, lifted up or flapping about in perilous looseness, and it is well known that in the repair shops the rectification and replacement of capping iron is quite an expense. Probably it is such a familiar and disdained portion of a wagon's anatomy as to cause no thoughts on a more satisfactory system, for the protection of the edges of top planking. The problem is well worth tackling on account of the vast number of wagons in British Railways and the fact that the slightest saving would be multiplied into astronomical figures on this account alone. This would be a fruitful field for the drawing offices to explore. There must be more efficient methods of protection than this age-old and crude arrangement which is so easily disturbed under the ordinary conditions of wear and tear.

New Central Line Extensions, London Transport

THE formal opening last Friday, by the Minister of Transport, of the extensions of the Central Line of London Transport, suggested Hollywood. There were batteries of photographers, and flashlights as the Minister and others made speeches, followed by refreshments. The guests were whisked straight from Greenford to West Ruislip and then back again. There was no inspection of the new stations. No doubt this is "the new order," but whether the publicity received justified the cost of the entertainment, is questionable. We are old-fashioned enough to prefer the opening ceremonies of the old London Transport with its predecessor the "Underground." Then there was a press inspection a day or two before the formal opening, followed by a less detailed inspection on the opening day, and a public luncheon and speeches.

Three sections of line for tube train operation have added some ten miles to the total length of the Central Line, and this was the first formal opening of a railway extension in London since nationalisation. The distance from West Ruislip to Loughton is 29 miles. Principal interest attaches to the Western Extension, as this was new construction alongside the London-Birmingham main line of the Western Region of British Railways, and involved heavy earthwork. Effort has been directed to making the new electric train service available to the public at the earliest possible moment, and last August more than 400 men were at work on the four-mile section from Greenford to Ruislip, completing the final stages in the extension of the Central Line westward, as the suggested further extension to Denham has been deferred indefinitely. Work at some of the new stations is complete only up to platform level, but, by provision of prefabricated booking offices and footbridges, and the fixing of electric lighting on temporary wooden posts, it has been found possible to provide a reasonable public service. In the east, the extensions are electrifications of two further sections of Eastern Region suburban lines. The total cost of these new west and east extensions is given as £2,000,000.

It is estimated that some 70,000 persons live in the areas served by the new west and east extensions. In the west, considerable relief should be afforded to the overtaxed Piccadilly and Metropolitan lines to Uxbridge by giving an alternative route to town for residents of the Ruislip and Ickenham neighbourhood. On the Eastern Extension, persons living in the Loughton, Chigwell, and Grange Hill neighbourhood for the first time have the benefit of a frequent electric train service to the City and West End. There will be a further development next year when the Central Line is extended to Epping.

Traders' Season Tickets

THE introduction of Traders' Season Tickets can be traced back to 1862. Records reveal that the practice of issuing season tickets at varying low charges to corn factors, cattle dealers, and colliery proprietors became general from 1877 onwards. These Traders' Season Tickets since their inception have afforded traders and their representatives the opportunity of business travel at reduced fares. They were issued originally to traders who paid to each railway company over whose line the ticket was desired a certain minimum annual amount in respect of carriage charges for each ticket issued. The quantum varied according to the issuing company, and in an endeavour to bring about a measure of uniformity, a standard scale of charges was adopted by most of the railway companies in January, 1889. This scale fixed the annual traffic payments at a minimum amount of £300 in respect of each ticket which was subject to a charge for not less than 30 miles.

From 1918 to 1923 the qualifying amount fluctuated, and reached a peak figure in September, 1920, of £1,000 in respect of each ticket issued, and, moreover, the minimum distance was raised to 50 miles. Unfavourable economic conditions obtaining in the late 1920s made it necessary again to consider revision of the qualification to enable the small trader to participate in the scheme, and on January 1, 1929, the qualify-

ing amount reverted to £300 per ticket. Although this level was maintained until September of this year, changing valuations made it necessary again to increase minimum payments to £400 per ticket as from October 1, 1948. The minimum of 30 miles had already been reverted to in January, 1933.

A Traders' Ticket is now issued for *bona fide* trade purposes to traders who qualify by having consigned or received merchandise traffic for which rail carriage charges amounted to not less than £400 for the twelve months preceding the application, and further tickets may be issued in respect of each additional sum of £400. Agreement has been reached with the London Midland, Eastern, Southern, and Western Regions whereby carriage payments with one or more of these Regions may be aggregated to satisfy this condition.

Shipowners' Season Tickets also are issued in respect of shipowners, etc., whose payments in respect of dock dues and wharfage amounted to not less than £3,500 in respect of the twelve-monthly period preceding the application. Both Traders' and Shipowners' Season Tickets are issued for 3, 6, and 12 monthly periods, and the charges are, on the average, approximately 40 per cent. below the scale of standard charges for ordinary season tickets. The six-monthly charge is one-half the twelve-monthly rate *plus* 12½ per cent., and the three-monthly charge is one-half the six-monthly rate *plus* 7½ per cent.

Another concession affecting traders who qualify for Traders' Season Tickets is the sale of bulk travel in advance. This concession is particularly advantageous, by reason of its great flexibility, to firms who, in connection with their business travel, expend a minimum amount of £80 first class (and third class travel combined if so desired) or £50 third class, within a period of 12 calendar months. On advance payment of these amounts to the Railway Clearing House, bulk travel vouchers are issued, and can be exchanged at any time at any British Railways station booking office. The reductions over cost of ordinary travel are:—

- (a) On standard ordinary fares: a reduction of 32.5 per cent. is made in respect of first class tickets and 25 per cent. in respect of third class tickets for journeys in Great Britain.
- (b) On monthly return tickets: a rebate of 5 per cent. (first and third class) is allowed from the monthly return fares.

A form of application can be obtained through any British Railways station, or from the Railway Clearing House, 203, Eversholt Street, London, N.W.1.

British Railway Statistics for 1947

WE are glad that the Ministry of Transport has issued a summary table of statistical returns, made by the railways of Great Britain for 1947.* The table has been prepared on the same basis as the summaries already published for the years 1938 to 1946, so that comparative statistics for the whole period of Government control are available for the first time. The story they tell is not exhilarating.

Compared with the poor year of 1938, the number of passengers originating in 1947 declined by nearly 8 per cent., though a passenger travelled for 21 miles on an average, instead of 16, and paid 2s. 2d. for his journey, instead of 11d. Freight traffic tonnage was 3 per cent. less than before the war; train-mileage was 15 per cent. down, but wagon-miles almost reached the 1938 level, because the average haul of freight traffic lengthened from 59 to nearly 74 miles. Freight train speed was 17 per cent. slower and coal consumption was 23 per cent. higher at the peak figure of 64.95 lb. per engine-mile.

The number of "wagons forwarded loaded" in 1947 is given as 37,549,000. That is the figure compiled by the Freight Rolling Stock Control Committee and includes wagons of tranships forwarded from tranship stations. It therefore differs from the figure of "loaded wagons forwarded" which appears in *Transport Statistics*, as explained by Mr. J. H. Brebner, Chief Public Relations & Publicity Officer, British

* Summary Table of Statistical Returns of Railways of Great Britain, 1947. His Majesty's Stationery Office. Price 6d.

Transport Commission, in his letter in our October 8 issue. The Control's figure is an accurate measure of the burden falling on the railway-owned wagon stock and it will be a pity if it is not published in future. The *Monthly Digest of Statistics* for October gave the Commission's figures for the current year and for the first time explained their make-up correctly. The change breaks the continuity of the *Digest's* table and makes a difference of from 8 to 10 per cent. in the total for a four-week period.

It so happens that the weekly statement of wagon loadings issued by the Association of American Railroads is compiled on much the same lines as our Freight & Rolling Stock Control has followed. The American statement gives separately the number of wagons forwarded with less-than-wagon-load traffic, covering each wagon movement from transfer points. In the States it is regarded as a pretty safe gauge of business activity and is used to frame an estimate of coal production each week before exact tonnages of output are assembled from the collieries. The American railways like live statistics. For example, they can tell that in September the number of wagons of "smalls" was 10 per cent. below 1947 and 12 per cent. below 1946. The average wagon load of "smalls" has fallen from the wartime level of 10 tons by 25 per cent., or thereabouts. The railways have had timely warning that recent advances in freight rates may be driving traffic to road and air carriers.

The Problem of Coal

UNDER the above heading *The Times* published on November 22, 23, and 24 a series of articles by Sir Charles Reid, who was mainly responsible for the report on the coal mining industry's technical reorganisation and was one of the original members of the National Coal Board. Sir Charles Reid resigned recently because he came to the conclusion that the existing organisation for controlling the industry is wrong and will never succeed without the most vital changes.

The second article analyses the present organisation of the National Coal Board and raises questions which have a distinct bearing on the arrangements adopted for conducting our nationalised transport undertakings. Sir Charles Reid stresses the difficulties which arose because certain members of the Board had functional duties and so were prevented from taking a broad national view of policy. Large staffs were built up at headquarters and in the eight divisions, into which the coalfields were divided, though nobody was in complete control of the executive work either in London or at provincial centres. The result is that the General Managers in the 49 producing areas, who are expert mining engineers, are deprived of the power to exercise initiative and are unable to make decisions, which ought to be within their province. There is, consequently, no adequate control over cost; management and men are tempted to be content to settle down as mere cogs in a huge machine. The coal industry, Sir Charles Reid fears, is fast degenerating into a dull, mechanical form of civil service.

This is a formidable indictment and the remedy suggested is to decentralise management so that individual energy and enterprise will be restored. Certainly the National Coal Board has failed so far to produce cheap and abundant coal of reasonably good quality. We regret that we see few signs at present of the British Transport Commission being any more successful in providing cheap and efficient conveyance either of passengers or merchandise. It will be possible to form a more definite opinion when the first annual report of the Commission is published.

We are concerned especially about the general expenses and administrative costs of British Railways, which, so far as we can judge, must have increased substantially since January 1, whereas in theory unification should have reduced them. The organisation adopted for the Railway Executive may be open to some of the criticisms levelled by Sir Charles Reid at the National Coal Board's arrangements. In any event his views are worth the careful consideration of all engaged in the management of large-scale undertakings.

The Maunsell Era on the Southern Railway

NO doubts concerning the keenness of the professional locomotive engineer's interest in Maunsell's great work for the Southern Railway, could have remained after witnessing the size and enthusiasm of the audience which filled the meeting hall, when Mr. C. S. Cocks, M.I.Loco.E., presented his paper, "History of Southern Railway Locomotives to 1938," to the Institution of Locomotive Engineers on November 17.

Before embarking on the history from 1923 onwards, Mr. Cocks commenced his review a few years earlier, so as to show the scene at the grouping in its proper perspective. It is an interesting fact that each of the three main companies constituting the Southern Railway had a change of Chief Mechanical Engineer during the 1911-13 period: each of these engineers had inherited a different tradition by training and environment, and each found himself in charge of several hundred locomotives designed for turns of duty which varied considerably between the three different systems. Of these three men—Urie, Billinton, and Maunsell—Urie was by far the most conspicuously active in changing the old order which had existed before his arrival. Billinton and Maunsell were both innovators, but in quite different ways; they both produced some highly meritorious designs on their own lines (Billinton's 2-6-0s being particularly fine machines), but they did not introduce such a note of rebellion as characterised the first Urie "H.15" class 4-6-0, which appeared in February, 1914, fifteen months after Dugald Drummond's death. This sweeping change, which permeated the tender as well as the engine, was due, Mr. Cocks tells us, to Urie's experiences as Works Manager at Eastleigh, where he was responsible for repairs to the Drummond engines.

The Brighton line had gone in for tank engines in a big way—big even by comparison with its two neighbours, where tank engines formed a high proportion of the motive power. A very interesting design that never materialised was a Billinton 2-6-2 tank engine on the lines of the "K" class 2-6-0s.

On the South Eastern & Chatham Railway, there was much less to record than on the other two systems, because of the heavy and sustained commitments forced on Ashford during the 1914-18 war. However, what was lacking in quantity was conspicuous in quality, for the design of the first 2-6-4 tank locomotive No. 790 (which, we are told, was begun as early as 1914) shows how soon in his career Maunsell had decided on many of his most individual design features, to which he adhered persistently throughout his S.E. & C.R. and Southern Railway days.

In No. 790, Maunsell gave indications of his awareness of the secret of Churchward's brilliant success on the G.W.R.—the correct design of long-lap piston valve, which in the last quarter-century has revolutionised British practice. Maunsell, indeed, was the first Chief Mechanical Engineer to follow Churchward's lead consistently in his subsequent designs.

Other characteristic features of Maunsell engines which appeared in No. 790, were the tapered boiler barrel and the Belpaire firebox. Top feed was provided, and the peculiar design of superheater header, with snifting valves at each end of the main casting, also appeared. Incidentally, this was also the first example of his afterwards invariable practice of building a prototype locomotive for trial before committing himself to a large number to the same design.

On his appointment to take charge of the whole locomotive stock of the newly-formed Southern Railway in 1923, Maunsell soon found that his future locomotive policy was going to be dictated largely by an influence outside his own department, which, nevertheless, could not possibly be ignored—the great extensions then being planned in the electrified lines. For more than ten years, these far-reaching changes in operation were made, yet it is worth recording that at no time, in this rather discouraging atmosphere, did anything of a defeatist nature show itself in Maunsell's department. On the contrary, locomotive development was alive and continuous, with a readiness at all times to give a trial to any promising idea.

At a very early stage in Southern Railway history, Maunsell had to provide quickly a large number of powerful and reliable locomotives to haul heavy express trains over the greater part of the system. Not unnaturally, he considered first if any existing designs would suffice, as it would hasten the construction much more than if new designs were worked out. It is much to his credit that he chose, not one of his

own, but one of Urie's designs (the "N.15" class) as a basis, and by introducing a few important modifications, in due course he produced the "King Arthur" class. The original "N.15" appears to have been somewhat over-cylindered, but by reducing the dia. from 22 in. to 20½ in., Maunsell matched the cylinders to the boiler, and produced a design that has won appreciative comments wherever it has been used.

The interesting history of Maunsell's largest locomotive—the "Lord Nelson" class—is given in detail by Mr. Cocks and as the story unfolds, and one reads also of the appearance of the "Z" class 0-8-0 tank engines and the "Schools" class 4-4-0s, it is possible to see how their designer was gradually converted to the idea of multi-cylinder propulsion for any type above medium power. The "Schools," originally planned as a small edition of the "Lord Nelson," proved to be Maunsell's most brilliant success, far outstripping the larger engines in the level of their performances. One wonders what sort of a showing the other tentative designs would have made if they had been built; they are all of great interest and include a 4-6-2, a 2-6-2, and a 4-8-0 (all tender engines).

The influences of civil engineering restrictions and of financial limitations are frequently in evidence throughout the pages of Mr. Cocks's narrative. Maunsell must have had a considerable store of courage and resolution to continue in his eminently successful work in such depressing circumstances. Yet the paper records a most vigorous policy, and Mr. Cocks has rendered an excellent service to his profession in gathering together all the material for this fascinating history.

We think that a tribute should be paid to the Institution of Locomotive Engineers for having arranged for this and its two companion papers to be presented. The companion papers are those of Mr. E. S. Cox and Mr. B. Spencer, dealing respectively with the locomotive histories of the L.M.S.R. (1923-32) and of the L.N.E.R. (1923-41). One further paper in this series remains to be written. We trust that before long, its publication will be duly announced, for it certainly will be of as great an interest and value to the locomotive engineer as the other three.

The Indian Railway Position Reviewed

ANSWERING charges made by the Federation of Chambers of Commerce & Industry against the working of the Indian railways, the Railway Board has issued a detailed statement showing facts and figures to refute erroneous conclusions reached by the Federation as to the general transport position in the country and its effect on industries. The reply stresses the great changes which have come about in the nature and extent of demands made on railway transport when set against the designed capacity of railways to handle them. In the first place, the partition has changed the trend of traffic. The port of Karachi can no longer be used by India. Large quantities of food grains continue to be imported from abroad. Thousands of tons of coal, which in pre-war years went by sea, have had to be railed across the country. New industries have come into existence and older ones have developed in some areas between 1938-39 and 1946-47.

Despite the handicaps of war, and later, partition, the traffic moved by the railways has been considerable. The following table gives comparable figures of the average monthly number of wagons loaded with goods of all descriptions:—

Year	Broad gauge	Metre gauge
1944-45	284,764	124,067
1947-48	260,553	118,475

(Figures exclude old N.W., B.A., E.P., and Assam Railways)

Last year's figures include the immediate post-partition period when traffic in some areas was severely affected, if not completely suspended. Yet the figures fell short of the loading in the peak war year, 1944-45, only by 8.5 per cent. on the broad gauge and 4.5 per cent. on the metre gauge.

The general trend of traffic is indicated also by goods and passenger train mileages:—

Year	Broad gauge	Passenger	Total
1938-39	36,426	47,347	83,773
1945-46	41,514	39,881	81,395
1946-47	41,109	44,513	85,622
1947-48	39,313	45,282	84,625
Metre gauge			
1938-39	14,655	28,461	43,116
1945-46	16,955	18,257	35,212
1946-47	15,977	23,321	39,298
1947-48	14,282	25,152	39,434

(Figures exclude old N.W., B.A., E.P., and Assam Railways)

The total train-mileage on the broad gauge is greater for 1947-48 than for 1938-39. During 1945-46, the passenger train miles went down considerably, but for 1947-48 they are nearly up to pre-war level, and the goods train-miles are greater. On the metre gauge, an appreciable increase in the passenger train-miles is recorded from 1945-46 figures.

The statement goes on to deal with the position of major industries in relation to transport. A slight fall in the tonnage of coal carried by rail in the latter part of 1947 is indicated, but considered inevitable by the Railway Board because of disturbed conditions in the Punjab and some areas served by the former E.I. and B.B. & C.I. Railways. The loadings in May-June, 1948, were below the expected level because of casualties among locomotive running men, who, not used previously to footplate work, could not stand the severe heat, and to engine failures resulting from faulty management by inexperienced crews.

The Board then quotes statistics of coal despatches to industries since 1944-45 and the production of those industries which, when put side by side, reveal a curious state of affairs. For instance, coal despatches to the iron and steel industries showed an increase of 18 per cent. in 1947-48 over the 1944-45 figures, yet there was a decline of 12 per cent. in production during the same period. Similarly, the production in the jute and paper industries declined by 6 per cent. and 29 per cent. in spite of substantial increases in the quantities of coal supplied. There is evidence, too, largely in the Ahmedabad area, that the industries receiving large stocks of coal, are unable to receive and unload wagons at the rate at which they reached them.

Refuting the charge of the accumulation of huge stocks in factories because of shortage of wagons, the Board asserts that the slowing down of despatches resulted from the congestion at the receiving end, caused by the consignees' failure to remove goods expeditiously from the railway premises. The Board's conclusion is that the price factor, and not transport shortage in the main, has influenced despatches.

Figures quoted by the Board show that supplies from the main textile producing centres of Bombay and Ahmedabad to the different consuming areas of the country represent a 110 per cent. fulfilment of the target in relation to transport. Here, also, instances of transport not being fully utilised by the industry are quoted. Dealing with agriculture commodities, the Board gives the following figures showing the quantities of food grains and cereals moved by rail and the increase registered since decontrol:—

Month	Food grains	General Merchandise
	(In wagons)	
October, 1947	33,199	359,302
November, 1947	29,317	274,920
December, 1947	31,885	431,969
January, 1948	36,411	473,440
February, 1948	41,015	479,634
March, 1948	42,293	492,451
April, 1948	43,017	468,778
May, 1948	43,229	417,709
June, 1948	41,069	460,737
July, 1948	45,233	425,109

The Board has made the counter charge that personal gains and speculations are the main reasons why commodities do not move in spite of the provision of rail transport, as, merely by holding back stocks, prices can be forced up.

Various measures being taken to improve the motive power position, which is the main reason for the slower turn-round of wagons, are explained. The Indian railways will receive 863 locomotives of all gauges by the end of 1950—146 in 1948; 455 in 1949; and 262 in 1950. In this connection, reference is made to the Chief Commissioner's recent visit to the United Kingdom and the United States of America and to the Mihijam locomotive factory scheme. The capacity of the latter, when in full production, will be 120 locomotives and 50 spare boilers.

In conclusion, dealing with the charge of dishonesty and corruption among railway staff, the statement says: "It may be added that despite the temptations around them, the large majority of railwaymen are honest, conscientious, and industrious; and they are working for the good of the country; the Board must point out that wholesale calumny of every one without exception on railways is as unfair as similar generalisations about those connected with industry and trade would be."

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Greater Use of British Canals

Snelvracht 42816.

Kloveniersburgwal 45,

Amsterdam—C. November 3

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—It is not surprising that the tonnage being moved annually on the British canals is so insignificant, compared with traffic on canals in other countries.

In continental eyes the type of craft which is in use is unsuitable and obsolete. There is an almost complete lack of modern handling equipment, and co-ordination with local carriers to serve adjacent districts likewise seems to be non-existent.

If a canal is available, intelligent use must be made of it, and it is unfair to state that rail traffic would be more efficient. Nothing points in that direction. It is entirely a question of management, which is proved also by the fact that some canal managements are spectacularly more successful than others. I believe that I am not far wrong if I state that if the British canals were managed by continental businessmen concerned with waterborne transport they would be able to develop waterborne goods transport in England with better results.

Yours faithfully,

M. TERWINDT

Locomotives Works Plates

29, Langdale Road,
Victoria Park,

Manchester, 14. October 25

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Attention was drawn by Mr. Latham in your September 10 issue to the removal from the brass makers' plates carried by locomotives of the late L.N.E.R. of the name of the building company. It was pleasing to learn from Mr. George Dow's prompt response in your September 17 issue that this pernicious practice was to be abandoned forthwith.

I regret to observe, however, that locomotives of former L.M.S. ownership are now emerging from Crewe Works with the building company's name removed from the plates. May we have equally prompt attention to this matter on the London Midland Region and an assurance from the appropriate officer of that Region?

It may be remembered that in London & North Western days a number of 4-6-0 locomotives of the "Prince of Wales" class were robbed at Crewe of the building plates affixed by the North British Locomotive Company, and these were replaced by nameplates inscribed "built Crewe." This lapse was doubtless intended to ensure continuance of the tradition that all L. & N.W.R. locomotives were built at Crewe, and can perhaps be excused. Unfortunately, the same cannot be said of the recent development, which appears to be designed to break a tradition and even to introduce a regrettable suggestion of politics into locomotive history and practice.

Yours faithfully,

HAROLD D. BOWTELL

Rail and Road Fares

Electrical Engineering Department,
Royal Technical College,

Glasgow, C.1. October 19

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—As a regular reader of your publication, and a student of railway affairs, I have wondered for a long time at the present discrepancies between the levels of passenger fares by road and rail, and tried to find out exactly what are the true causes of this phenomenon.

If the railways were restored to proper "peacetime" efficiency, would you consider that the operating costs of conveying passengers by rail would be greater than by road? I assume that when the British Transport Commission takes over road services, the total capital liabilities will be merged, as this commitment is irrecoverable, that is, money once spent on building a bridge, or a tunnel, is not recoverable, and only relative operating costs will determine fares and charges. I assume also that taxation on transport undertakings—rates for buildings, and so on—also will be a merged liability.

The railways here in the west of Scotland appear to me to have been allowed to fall into a state of obsolescence, and I would say that it would be most regrettable if what was once a fine system, built up at enormous expense, should

be allowed by default to be superseded by a medium which can never attain the standards of speed, comfort, and safety of which modern railways are capable.

Another question I want to ask—why is it that the railway authorities have never turned their attention to the possibilities of a lightweight railcar for country services? Such a vehicle, I should imagine, would accommodate about 60 passengers, and would give a service as frequent as that afforded by road transport.

If the vehicle is restricted to solo operation, a much lighter chassis could be used, and draw and buffing gear and through braking fittings would not be required. The vehicle would be powered by an oil engine, driving through a gearbox. Compressed air would have to be available for the brakes, and could be used also to facilitate gear-changing from either of two driving positions, and to operate automatic doors. With a crew of two, no platform staff would be required.

I understand that limited use of railcars has been made by the former G.W.R., but I should have thought that they could have been put into quantity production for general use.

Yours faithfully,

KENNETH F. BROWNE

[The question of relative road and rail fares is, of course, one of perennial controversy, and there is no short answer. First, railway fares are not based strictly on any estimate of operating costs, but are part of a complex rate structure for both passengers and goods in which the policy of "what the traffic will bear" has always been a factor. Secondly, what are regarded as operating costs need close definition before adequate comparisons can be made. Apart from capital liabilities (by which presumably our correspondent means interest on capital) there is the vital question of maintenance. The railways maintain in their entirety the road on which they run, its signalling, and its staffing and policing. Public passenger road transport uses a public facility in the form of a highway which is maintained, signalled, and policed by taxation, to which the road transport operator is only a contributor as a ratepayer on his properties and as a user of a licensed motor vehicle burning a taxed fuel, in common with the private car owner, and, indeed, many other road users. On the other hand, the public transport operator (whether passenger or goods) does not enjoy the exclusive use and control of his road, as does the railway. The railcar has been used extensively in a number of cases for country and main-line services, but every case is considered on its merits. Accessibility of stations is often an important feature. Also, the fare structure for such services must be related to the general system of railway charging, particularly where the rural line constitutes part of a through line.—Ed., R.G.]

The Distant Signal

South Indian Railway,
Trichinopoly, India. November 7

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I was interested to read the correspondence ending with the letter from Mr. E. V. M. Powell in your issue of September 24. The tendency in this country now is to move away from the unwarned stop signal and place the warner outside the outer. Rough statistics taken three or four years ago show that, where multiple-aspect signalling is in use, the chances of accident are reduced to one against 45 in two-aspect areas with unwarned stop signals. This, I feel, apart from the history of the establishment of its present use, which I seem to recollect dates from about 1860, proves that Mr. Powell's contention about the distant signal is correct.

The Burma Railway signalling is very similar to the signalling on the South Indian Railway described in my article in *The Railway Gazette* of September 1, 1944, the only difference being that bracket outers have not been provided and the signal aspects differ somewhat. The single outer signal (I would prefer to call it the home to coincide with its normal nomenclature in automatic block areas) cannot display clear if the line is set for the turnout, or if the line is set for the straight and the next signal is at danger, or the block is not clear. The distant can show clear with the outer at caution, provided the line is set for the straight, and the next stop signal or the beginning of the next block is at least braking distance past the outer.

The disadvantage of the Burma Railway arrangement is that the aspects cannot combine logically with straight three- and four-aspect signalling as used with automatic block, and the restriction of the branch outer to caution in all cases may raise difficulties where high-speed turnouts are encountered, or a situation such as the London Midland Region has at South Hampstead (discussed in *The Railway Gazette* of September 24, 1944) exists.

The South Indian Railway multiple-aspect signalling is

exactly the same in all respects as that encountered in straight three- or four-aspect automatic block, except that the attention aspect is used in addition to denote a turnout similar to the L.M.R., and by virtue of that particular feature the bracket signal or route indicator on the outer has been eliminated, which would be disadvantageous in certain locations, but in eight years' use has been found satisfactory.

Yours faithfully,

C. A. WHITE
Deputy Traffic Manager
(Signals & Communications)

European Frontiers

Transport Economic Group,

British Troops in Austria,

Allied Commission for Austria. November 11

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—Your issue of November 5 has just reached me, and I have been looking at the map which accompanies your report on the timetable conference at Krakow. I realise that with a map of this size it is difficult to be precise, but I would indicate two things:—

- (a) Innsbruck is shown in Germany, and
- (b) Austria and Hungary are shown with a common frontier.

Yours faithfully,

E. C. INSTON,
Deputy-Director,
Economic Group (Transport Group)

[As indicated in the caption, this map was based on a pre-war one, which correctly showed Innsbruck in Germany after the *Anschluss*. The error was that the line through Salzburg was in the wrong position, as it should have been further east to show the frontier of Hungary. This was a regrettable drawing office slip which went undetected, but has been put right on our original for the future.—Ed., R.G.]

The Diesel-Electric Locomotive and Home-Produced Fuel

64, Martyrs' Field Road,
Canterbury. October 24

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—Mr. Lamond's letter on "Shorter Trains and More of Them" in your issue of October 22 is like the well-known curate's egg—good in parts. His idea of two trains daily on both East and West Coast routes, doing the London-Scotland journey in six hours, with observation car and cinema coach, is very attractive, but one is stopped with a jerk when one reads that "of course such trains should be . . . hauled by diesel-electric locomotives."

Why "of course"? Mr. Lamond seems to think that the answer to all our railway problems is the widespread disuse of steam and the substitution of wholesale diesel-electric traction. Apparently he has not considered that, whereas we already have, here in England, the fuel for propelling our steam locomotives, every drop of diesel fuel has to be imported from abroad, and generally paid for in dollars.

The apparent success of diesel-electric traction in the U.S.A. has caused many people to think that the diesel is the only engine of importance, and that in future the steam engine will be outmoded and forced off the rails. It is interesting, therefore, to note some remarks made in a recent issue of an American publication, *Railroad Magazine*. In an article in the October issue, the writer calls attention to several facts about dieselisation that are not very pleasant reading to its proponents.

He points out that, with the growing demand for fuel oil (and this includes the demand for it by other forms of transport as well as by the railways), the U.S.A. is "rapidly becoming an oil-importing nation" (the italics are mine), and that the domestic supply is inadequate and reserves are dwindling. Further, in spite of the assumption that diesel engines could run on a very low grade of fuel oil, it is found by experience that this is not so, and for continued operation, a high-grade fuel is necessary to avoid corrosion of the working parts of the engine.

He continues: "Taking all of these facts into consideration, we can see that the complete dieselisation of our American railways, as proposed and prophesied in many quarters today, could lead to disastrous military and economic consequences. In short, the day might well come when we would not have a drop of oil available for these gaily painted behemoths of the bright new transportation world. Then indeed would diesel horsepower prove Trojan horsepower, incapable of self-movement and packed with very real danger for all of us."

If that is the situation in the land where the oil is produced,

should it not act as a warning to us in a land where every drop of oil must be imported, not to put any faith in diesels? It is true that the diesel has many advantages over the steam locomotive, but of what use is a splendid diesel locomotive with a million advantages and not a drop of fuel to run it?

If the coal-burning steam locomotive as we know it now is not efficient for the work it is required to do, steps should be taken to improve it and make it more efficient. If this should mean that the traditional appearance of the steam locomotive (chimney at the front, cab at the back, and a tender behind that) has to suffer—well, it will be a pity in many ways, but the result will look no worse than the average American diesel-electric locomotive, and in any case, trains are not hauled by good looks.

The other alternative to an improved steam locomotive is the extended use of electric traction. I do not intend to discuss its advantages and disadvantages here. Sufficient it is to point out that electric generating stations can be built to use only home-produced fuel (or home water supplies, if hydro-electric generating stations become a reality) so that if imports of fuel were cut off, the trains could still run.

The results of the comparison trials between steam and diesel-electric locomotives on the West Coast main line will be of interest. If the diesel is shown to be the better locomotive, this should not serve as a notice "to build no engines," as Mr. Lamond would have it, but rather to show in what ways the steam engine is lacking, and how it can be improved. I welcome these experiments. But in the same way that a chemist experimenting with a pleasant-tasting poison would not use it to sweeten his tea, so I feel that the diesel (or any other engine requiring that all its fuel be imported) has no place amongst the main-line locomotives in this country.

Let there be experiments by all means, but let us never lose sight of the fact that the most successful locomotive is not the one with the most advantages on paper, or under the special conditions of the test, but the one that will run consistently well on the fuel that is always available for it. And that fuel, in any country, is the fuel that is produced at home.

Yours faithfully,

ARTHUR G. WELLS

The Example of U.S.A. Railways

Frognaal. November 17

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR.—One can agree with some points in Mr. Brendan Bracken's speech, reported on page 561 of your November 12 issue, and especially about the need for bringing forward young men possessing energy and new ideas. The rhetorical passage about American railways, however, will not stand the cold light of statistics. It reads: "They had proved that the best way to strengthen turnover is to increase speed, slash costs, and offer new and attractive services to travellers and traders. It is quite remarkable to see the progress of certain American railways from bankruptcy to prosperity through the recognition of their presidents and directors that salesmanship is essential to transport."

Below are stated the relevant facts and figures.

(1) The installation of diesel streamliners helped to raise average passenger train speed from 36.9 m.p.h. in 1939 to 37.5 m.p.h. in 1947, but has not increased the total passenger takings, which in the first seven months of this year were .5 per cent. below 1947. A number of fast freight trains has been introduced, but on the whole freight train movement was slower last year than in 1939—16 m.p.h. against 16.7. The volume of freight traffic to July this year was about 3 per cent. below 1947. An increase of 14.1 per cent. in freight revenue was due entirely to higher freight rates.

(2) So far from costs being slashed, operating expenses to July increased by 12.3 per cent. on 1947.

(3) Since 1939 the American railways have closed 6,000 route-miles for freight working and nearly 11,000 route-miles for passenger service. The recovery of some railways is due to:—

- (a) drastic reorganisation of capital to the great hardship of stockholders;
- (b) the retention of war profits less war taxation;
- (c) the exceptional prosperity of America in 1947;
- (d) increases in railway charges in 1947 and 1948.

Advertising and salesmanship may have had some effect, but that cannot have been more than incidental.

At the end of July, 15 railways operating nearly 8,700 miles, or more than 40 per cent. of British Railways mileage, had deficits aggregating about \$11,500,000. Clearly the United States is far from solving its own railway problems.

Yours faithfully,

R. BELL

The Scrap Heap

SIGNAL FAILURE

Lots of people have exemplary characters except for cheating the railway, said a solicitor at Dartford.—From "The Evening News."

"TRAIN WENT TOO FAST"

A passenger pulled the communication cord of a London-Portsmouth train "because it was travelling too fast."

He told the guard that he had written to the railway saying he would pull all trains up when they went too fast.

For this he was fined £5 and £5 5s. costs.—From the "Daily Express."

UNDERGROUND MOVEMENT

Seven transport chiefs, headed by Lord Latham, London Transport Chairman, and Sir Cyril Hurcomb, Chairman of the British Transport Commission, hurled themselves into a crowded tube train at Holborn on Tuesday night.

They pushed and nudged. "Mind the doors," shouted a guard. Six of the seven got in. Lord Latham was almost inside, when the doors closed. But he was on a mission, and he pressed on regardless. With a push he managed to get in. Then a jerk, and his coat was clear.

"Meredith, we're in!" he shouted.

The straphanging expedition was part of a plan to find out what happens in the rush hour. They saw what happens on the Piccadilly line at Holborn, where 11,000 passengers an hour are got away on 150 trains. Then they went to Kings Cross to see what happens there. After that they decided to go home.

The experts didn't say what they were going to do about rush-hour congestion. But Sir Cyril Hurcomb said: "People need not be so closely packed as we have seen this evening." He added that he usually goes to work by bus from Kensington to St. James's Park.

Lord Latham, too, said that, though he often used the Tube, he found it easier to reach his office from Baker Street by bus.

The seven traffic chiefs will not produce official reports of their evening's observations. But Sir Cyril Hurcomb added: "We will remember tonight, though."—From the "Daily Mirror."

THE BUG LETTER

A friend of mine who was travelling in the United States in a railway coach overnight was bitten by one or two insects that were travelling with him. He complained to the railway company and received a letter in reply saying: "This is extraordinary. It has never happened before in the history of the company. We will send a team of trained investigators to the spot to see that it does not happen again"—the usual Civil Service nonsense. My friend was quite satisfied until he held the envelope up to the light and saw in it a slip of paper which said: "Send this guy the bug letter."—Mr. A. E. Marples, M.P., in the House of Commons.

PENICILLIN BY RAIL

To save the life of a boy, a box of penicillin was sent by rail from Nottingham to Merthyr, for Maerdy Hospital, late on Wednesday morning, November 10, and British Railways undertook to deliver it by 7 p.m. that day. It was forwarded by through service from Derby to Gloucester, and the Western Region held a train eleven min. at the latter station, so that it should be sent on from there without delay. As a result, the box was delivered to the hospital thirty min. before the specified time.

Going Down



Down



Seen in the photographs at Holborn tube station reproduced above, gaining first-hand knowledge of rush-hour tube traffic, are Sir Cyril Hurcomb, Chairman of the British Transport Commission; Sir William V. Wood, Mr. John Benstead, and Lord Rusholme, Members; Mr. J. H. Brebner, Chief Public Relations & Publicity Officer, B. T. C.; Lord Latham, Chairman, London Transport Executive; and Mr. A. B. B. Volentine, Member, L. T. E. (see also article above and news paragraph on page 622)

100 YEARS AGO

From THE RAILWAY TIMES, Nov. 25, 1848

BRISTOL AND EXETER AND GREAT WESTERN RAILWAYS.

To the Editor of the Railway Times.

SIR,—Allow me to call your attention to the system lately adopted by the various Railway Companies, in the hope, of course, of benefiting their income.

But, for the present, I would more particularly confine myself to the Bristol and Exeter, in connection with the Great Western Railway.

They have thought fit to abolish entirely the return tickets. I have only to state one fact: I frequently go to Bristol, and my general plan was to take a second-class return ticket; but as I was prevented from that by the late change, I determined to go in the third class, and what was my surprise when, on entering the carriage, I found about sixty others of the most respectable tradesmen of Exeter, who each of them declared they would have taken return tickets. We made a calculation, and by that single train the Directors lost 15*l*.

This is a daily occurrence, and what a loss will there be at the end of the year, if the Directors persevere in the present course. There may be some alterations required, and if there are too many trains daily let them be lessened, that all those that are sent may be full; but in all cases where they have attempted to increase their fares, it has been invariably found that their income has been reduced.—Yours, &c.

EXON.

Exeter, Nov. 23, 1848

TAILPIECE

THE NEW ORDER

Oh for the spacious days of yore
I knew for forty years or more,
When railway names sonorous,
In full familiar chorus,
Resounded through the corridors
And echoed to the topmost floors.
Alas, alack, and, likewise, dash!
Our nomenclature's had a bash;
Naught but abbreviation
Is heard about the station—
Names that were once our joy and pride
Initially transmogrified.
For now we talk of C.R.Os,
Of C.C.Es, and P.R.Os,
And—twenty thousand pities—
Even "ad hoc" committees,
And one who's known about the place
As HE and HIM (in upper case).
I wonder would the M. of T.,
The R.E. or the B.T.C.
Comfort a soul that's harassed
And otherwise embarrassed,
And chide my bankers, who refuse
To recognise my I.O.U.s.

A.B.

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

SOUTH AFRICA

Durban Bay Reclamation Project

The reclamation work being carried out by the South African Railways at the head of Durban Bay is making good progress. The scheme was planned in 1944 and the work of reclamation by pumping began in April, 1945.

To provide for the rapidly expanding volume of traffic at the port of Durban, space had to be found for new marshalling yards and workshops, and these will be among the facilities to be re-located on the reclaimed ground. The total area to be developed is about 1,300 acres.

In addition to the pumping of 5,000,000 cu. yd. of sand by dredgers, two fairly large rivers and a minor stream have had to be diverted and will be conducted ultimately through the reclaimed area in concrete-lined converging canals. The total length of these channels is 10,200 ft.—the Umbilo Canal 5,500 ft. long and 102 ft. wide, and the Umhlatuzana 3,600 ft. long and 141 ft. wide. The combined canal into which the two rivers converge will be 1,100 ft. long with a bar width of 197 ft. Before the work on the canals can be completed, foundations will have to be placed on bridge sites, and cylinders for them are now being sunk at the upper end of the Umbilo Canal.

The reclaimed land will rise inland at a gentle slope from a level of 12 ft. above low water on the line of the future quays to a level which will ensure adequate natural drainage to the sea. The area between the rivers will be drained into the canals. At present the dredgers in the bay have pumped 85 per cent. of the quantity of sand required.

The marshalling yard will be laid out on the portion adjoining the bay. Electric running sheds, carriage and wagon yards with transhipping sheds, and all the necessary subsidiary buildings and facilities also will be sited here, and the new workshops will be erected on the area between the rivers.

The complete marshalling yards, sited on both sides of the combined canal, will cover an area of nearly 500 acres and will comprise over 60 miles of track. The workshops will cover ultimately the whole of the area between the canals which is 230 acres in extent, but some of the buildings provided for in the plans will be erected only at a later date when extension becomes necessary.

RHODESIA

New Passenger Services

For the first time since the war accelerated passenger train services come into operation as from December 12. The new timetable will provide new and faster services between Bulawayo, Salisbury, Umtali, and Beira, and also will speed up travel to the Victoria Falls and Northern Rhodesia. It is understood that further improvements may be expected next year when additional "15th" class Beyer-Garratt locomotives, already on order, arrive.

Chairman Forecasts Expansion

Lt.-General Sir Clarence Bird (Chairman of the Rhodesia Railways Board), speaking at the opening of the Rhodesia Railway Workers' Union annual conference at Bulawayo on October 27, said:

"Enormous expansion lies before the Rhodesia Railways during the next year or two. This unprecedented expansion will tax all our resources to the utmost."

Traffic at Beira Port

The Department of Commerce & Industries convened on October 26 a special meeting of various official representatives to discuss the position at Beira Port where renewed congestion is expected. Estimated traffic for the next three months is considerably in excess of the maximum capacity of the Port.

BURMA

Checking of Trains

Sustained efforts by officers and staff of the railway to combat ticketless travel continue. Arrangements have been made with the district superintendents of police concerned for surprise checks of trains to be carried out jointly by the railway staff and inspectors of police of the district throughout the system.

INDIA

New Railway Opened

The Eastern Punjab Railway has opened a new broad-gauge branch from Rupar to Talaura, a distance of 35 miles. This branch is intended to serve the requirements of two important projects, which are expected to add greatly to the prosperity of the East Punjab. These are the Bhakra Dam Project and the Nangal Hydro Electric Scheme, which will bring many acres of fallow land under cultivation and increase substantially the industrial potential of the province.

The construction of the line involved heavy cuttings for two miles, after crossing the Sirsa stream and before reaching Bharatgarh town. Worked on the absolute block system, the line has two crossing and three flag stations, and has a maximum gradient of 1 in 200.

The "People's Express"

The East Indian Railway Administration has introduced a new express train to be called the "Janata Express," that is, a train for the people, between Patna and Delhi. The name of the train conforms to its composition, which provides only third class accommodation.

CANADA

Objections to Freight Rate Increases

The Federal Cabinet, whose committee heard in September the appeal of seven provinces against the Transport Board's award on March 30 last of a 21 per cent. freight increase to the railways, has referred their complaints back to the Transport Board. It considers that "some portion of the corporate needs of the Canadian Pacific Railway should be borne by the income derived from non-railway operations."

Short of ordering a suspension of the 21 per cent. rate increase, the Federal Government meets to a large extent the demands of the complaining provinces about the formula used by the Transport Board in computing what it regarded as an adequate freight rate increase for the railways. In their petition to the cabinet, which was heard in September, the seven provinces, which have for nearly two years fought

against any freight rate increase, listed ten objections to the board's decision of last March.

The Federal Cabinet decision says, in effect, that it is inclined to agree with many of the provinces' objections, and is referring the subject matter of the petition back to the Transport Board so that when, early in January, it opens hearings on the new application of the railways for an interim rise of 15 per cent. and a permanent increase of 20 per cent. those objections will be given special attention. It is favourably impressed with the view that income derived by the railways from sources other than their railway transport operations should not be excluded entirely by the board in determining the corporate needs of the railways.

The Transport Board is expected, though not instructed by the Federal Cabinet, to make an investigation to determine the apportionment to be made, between railway earnings and other income, of fixed charges, depreciation, income taxes, dividends, and surplus, and the various complaints of the provinces are referred to the board. The Cabinet again reminds the provinces and the people that it ordered the Transport Board on April 7 last to make a thorough probe of the general freight rate structure with a view to removing regional discrimination, that it changed the composition of the board by naming Justice M. W. Archibald as chairman, that it would name a Royal Commission to study and report on questions of economic policy, and transport generally, that the board will open hearings on the new freight rate increase applications on January 11 next, and that it heard the provinces' appeal on September 27 and 28.

UNITED STATES

Season Tickets by Post

The Chicago & North Western has instituted a system whereby suburban train travellers may buy in advance by post 54- and 60-ride season tickets. Tickets may be bought for one or more months up to a full year in advance by sending a remittance to the railway, and are sent to the customer by post. If, because of holidays or other reasons, a ticket is not needed for a particular month, it may be posted back for a refund.

POLAND

Hungary—Gdynia Transit Traffic

Extending the facilities recently granted to the Hungarian transit traffic through Poland in connection with the use of Gdynia, through goods rates between Hungary and Gdynia are to be introduced as from January 1 next. Although this additional transit movement through Gdynia has been welcomed by trading circles, some apprehension has been expressed as to the nationalisation of forwarding houses at Gdynia. Recently, four of the most important forwarding firms at Gdynia were taken over by the State.

U.S.S.R.

Diesel Traction on Tashkent Main Line

Diesel traction on the Krasnovodsk (Caspian Sea) to Tashkent main line was introduced early in October. It is limited for the present to the section between Dzhezak, 155 miles south-west of Tashkent, and Zyadin (between Samarkand and Bokhara), 137 miles west of Dzhezak. The locomotives have been built by the Kharkov locomotive works.

Further Central Line Extensions

Simultaneous opening of Eastern and Western sections totalling some 10 miles

ON Sunday last, November 21, three new sections of line were brought into public use for Central Line tube train operation, adding in all some 10 miles to the length of the Central Line of London Transport. The sections are from Greenford to West Ruislip, in the west, which has involved new construction; and Woodford to Loughton, and Woodford via the Grange Hill loop to Hainault, in the east, both newly-electrified sections of existing Eastern Region lines.

Western Extension

The four-mile section from Greenford to West Ruislip completes the final stages of the Central Line westward, and adds four stations to the Underground system,

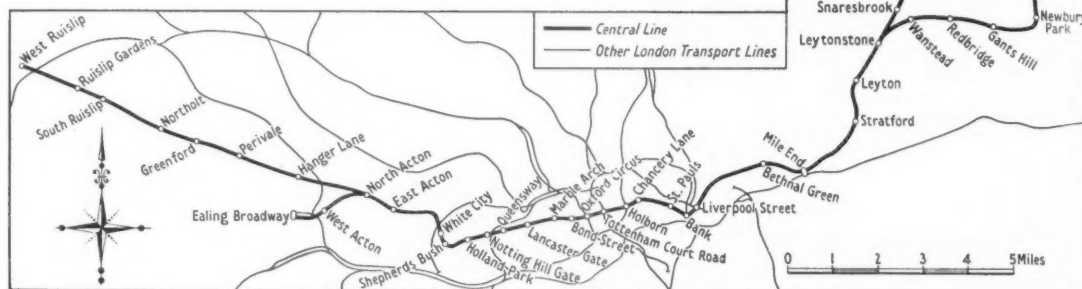
ting. All drainage from these passes through the toe wall and is collected by a main drain in front of the wall.

At two of the new stations, South Ruislip and Ruislip Gardens, which are constructed on embankments, piling has been necessary to carry the platform buildings and also the foundations for the platform coverings. The latter are of the "butterfly shell roof" type in reinforced concrete 3½ in. thick, with centre columns and stiffening beams 24 ft. apart, a novel form of construction which it is hoped will lead to economy in maintenance.

Bridges

The first bridge beyond Greenford is over a siding, very much on the skew, and

Birmingham, alongside which the new electric lines are built, the surrounding country was purely rural. In the intervening period, however, a great development has taken place, and most of the land is now occupied by housing and factories. Advantage has been taken by the local authorities of the opportunity provided by the new works to widen many of the roadways crossing the railway, and some interesting bridge construction has thus been involved. For instance, at Northolt Station, where the narrow Ealing Road crosses the line, a new bridge was built over the old and the new tracks



The extent of the Central Line ; West Ruislip to Loughton is 29 miles

namely, Northolt, South Ruislip, Ruislip Gardens, and West Ruislip. As shown on one of the accompanying drawings, the work has involved construction of two new lines of rail alongside the main line to Birmingham of the Western Region.

One of the main works was the widening of the Northolt cutting, some ½ mile in length, where 37,000 cu. yd. of London clay were excavated and taken away to form an embankment. About 2,500 cu. yd. of concrete were used to form a heavy toe wall to the cutting to prevent slips, and, to assist in this, drains 3 ft. wide and 4 ft. 6 in. deep have been constructed at intervals of 33 ft. in the face of the cut-

ting. It has a square span of 22 ft. It consists of abutments and wings in mass concrete, with a brick arch. The length of the arch has been extended so that angle of skew of the faces was reduced to 50 deg. The Grand Union Canal is crossed about a ¼ mile further by a truss girder of 158-ft. span. Although the canal crosses the railway diagonally, the bridge has been constructed on the square, because the previously-existing skew bridge carrying the G.W.R. main lines at this point had given continuous trouble in the foundations owing to uneven expansion.

At the time of the openings, from 1903 to 1910, of the direct G.W.R. main line to

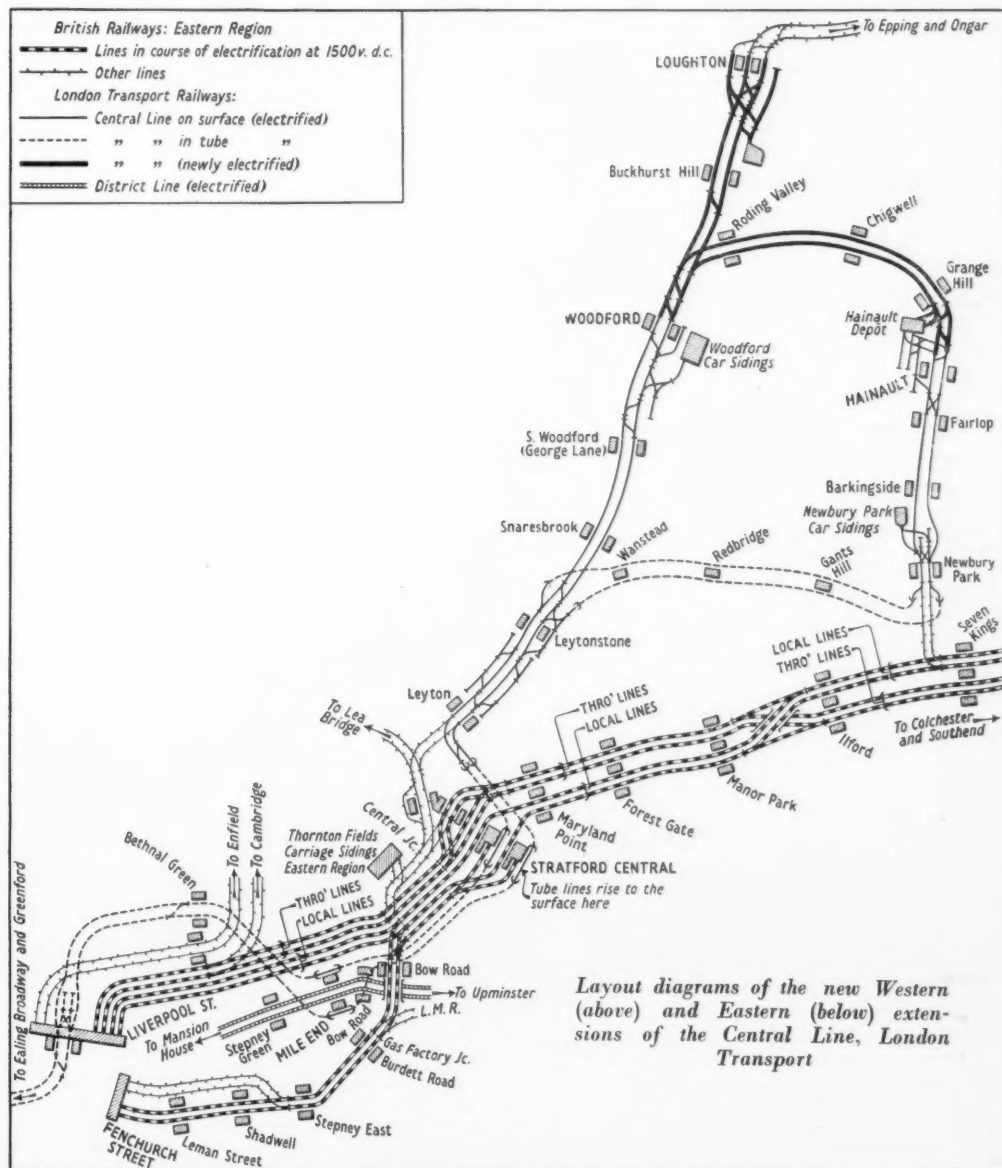
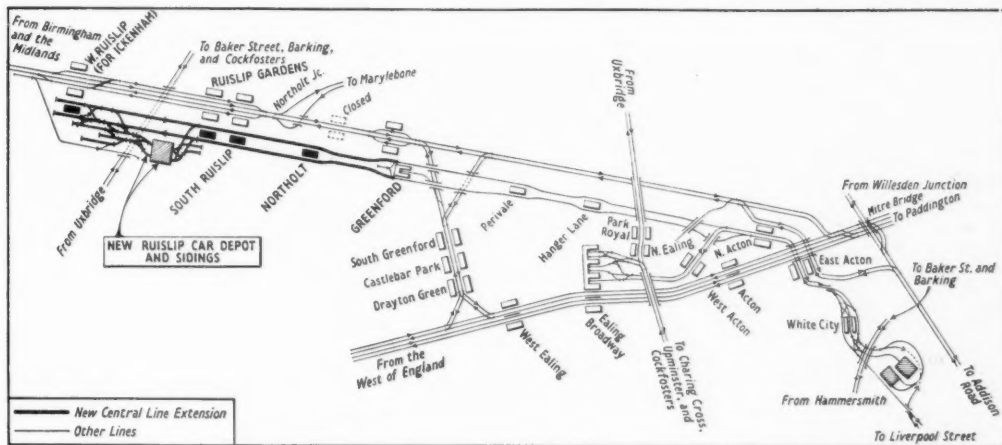
alongside the existing bridge, and of about half the width of the new road. On completion of the new half-bridge the old bridge was demolished and the second half of the new bridge put in hand. This new bridge at Northolt is typical of several, and is of plate-girder construction with pre-cast concrete jack arches supporting the roadway.

West End Lane passes beneath the railway diagonally close to Ruislip Gardens Station and has been widened to 60 ft. The skew is such that the plate girders carrying the new electric lines have a maximum span of 99 ft. On completion of the bridge for the new lines, the down steam trains were diverted thereto; as there are four lines between Northolt junction and West Ruislip, carrying the trains of the former Great Western & Great Central Joint Railway, both the new electric tracks were occupied by down traffic. Immediately, the two original down lines were thus released, the half of the old bridge carrying them was removed during a week-end possession, and the new half-bridge put in its place.

This work involved the temporary support of the remaining half of the old bridge in an ingenious manner. A girder was placed parallel with the track between the up and down fast lines, and the cross-girders carrying the bridge deck were strapped to it. Thus, when the night of final possession arrived, the half of the bridge



Plate girder bridge carrying Central Line electric tracks at South Ruislip



Layout diagrams of the new Western (above) and Eastern (below) extensions of the Central Line, London Transport

carrying the down tracks could immediately be cut away, without interfering with the integrity of the half which remained to carry the up tracks. On completion of the new half-bridge, the up traffic was diverted to it, thus releasing the remainder of the bridge for renewal. A similar process, simplified because the old bridge was of trough-girder construction, was adopted for a smaller bridge $\frac{1}{4}$ mile east of Ruislip Gardens.

Another important work has been the erection of 240 tons of steel girderwork in Long Lane Bridge, West Ruislip, to carry the widened roadway and the booking offices of West Ruislip Station. This work included the demolition of part of the existing bridge, the extension of abutments and pier, and the construction of reinforced-concrete columns to carry the steelwork and brick segmental arches over the electrified tracks.

This section of the Western Extension was scheduled originally to be ready for passenger traffic in July, 1940, and it will be recalled that considerable progress had already been made when the outbreak of the war brought about the suspension of the 1935/40 New Works Programme. When this part of the programme was resumed after the war, a large amount of work was entailed in preparing fresh contracts and getting the construction work started again.

Progress was hindered by the shortage of labour, although this was overcome partly by the employment of German P.O.Ws, who were replaced in August of last year by Polish labour. On the civil engineering side, the maximum labour force eventually reached a total of 222 men, about half of whom were British.

Track and Signalling

Throughout the Western Extension, London Transport has laid the new running tracks in 300-ft. welded lengths. Current rails, also initially welded into 300-ft. lengths, have been site-welded into lengths of $\frac{1}{2}$ mile. A total of 36 miles of rails weighing 3,400 tons, and 25,000 tons of ballast, were laid between Greenford and West Ruislip in seven months; 400 ballast trains were used. De-icing baths and point heaters have been installed at suitable points in the rails to obviate delays to trains in frosty weather.

Standard London Transport automatic colour-light signalling has been installed throughout, with a new master signal cabin at West Ruislip and a remotely-controlled cabin at Ruislip Gardens. London Transport has also run cable for the supply and distribution of power, and has equipped two new sub-stations at Northolt and Ruislip, which, together with the earlier sub-stations at Brentham and Greenford, are remotely controlled from Old Oak Common.

Stations

The four new stations are of the 440-ft. long single-island platform type, and are constructed alongside the down side of the corresponding steam-line stations of the London to Birmingham line, to which they are connected by subway or footbridge, excepting at Northolt, where the old main-line station was closed on Saturday, November 20, and is being demolished. At platform level, all work on the new stations is virtually complete, but building work is necessarily of a temporary nature, and is, in fact, the minimum required for operating purposes and public access to the platforms.

The Western Region of the Railway

Executive has been responsible for all civil engineering and architectural design and construction work on this extension, and the London Transport Executive for the equipment of the line.

Ruislip Car Depot

An integral part of the general scheme for extending the Central Line was the provision of new car depots at each end of the line. That at Hainault (at the eastern end) came into full service last May, when the line was extended from Newbury Park to Hainault. At the western end, an important new depot, with a capacity for 472 cars (184 under cover), was built before the war between Ruislip Gardens and West Ruislip stations on the south side of the line, with rail access from each end, and a 10-ft. approach road paved with reinforced concrete nearly a mile long leading from West End Road. The work of levelling the site incidentally entailed bringing $\frac{1}{2}$ -million cu. yd. of chalk filling from High Wycombe. During the war the depot was used by the Admiralty, but has been completely restored, and now contains nine miles of sidings.

The main car shed is a steel-frame building 941 ft. long and 241 ft. wide, with a floor space of 177,000 sq. ft. It contains 16 tracks, of which 15 have concrete inspection pits. Six of these are 880 ft. long, and the remainder 440 ft. long. The rails of the inspection pits are laid on walls so that there are pits on each side of the running rails as well as between them. At the ends of the pits, steps lead down from the floor of the shed, and 30 ft. from the steps access openings are provided through the walls supporting the rails. Similar openings are spaced at intervals of 60 ft. along the pit, and the rails are carried over them on rolled-steel joists anchored at their ends to the concrete walls by rag bolts. Recesses are made in the walls for electric lights. The floor of the shed is of concrete reinforced with steel fabric and finished with granolithic covering.

Drainage is provided for by 4 in. earthenware drains laid across the pit bottoms and discharging into 6-in. longitudinal collecting drains laid below the space between the adjacent pits. At the main sump on the collecting drain there is a manhole 2 ft. square. A considerable length of the surface drains is of precast concrete, including about 900 lineal yards of 18-in. and 24-in. spun-concrete pipes made with aluminous cement. The use of this cement was necessitated by the presence of sulphate crystals in the clay, which rendered the surface water corrosive to ordinary Portland cement.

The examination pits are between the rails only, which are of 95-lb. B.H. section resting directly on 8-in. by 3-in. reinforced-concrete padstones. The roof of the shed is composed of steel trusses in five bays carried on lattice girders and steel stanchions, the spans of the trusses being respectively 56 ft., 43 ft., 43 ft., 43 ft., and 63 ft. The roof covering is of corrugated asbestos sheeting alternating with patent glazing. The walls have brown facing bricks on the outside, with white flint-lime bricks inside. All column foundations are of concrete.

The equipment of the shed includes a refuse-collecting plant. This comprises five runs of 18-in. galvanised iron mains laid between the examination pits, connected with a 24-in. header across one end of the shed and fitted with 40 hoppers into which all the refuse from the cars is swept. The refuse is carried by air sucked through

a 26-in. main to a cyclone in the cleaning shed, where all the refuse is deposited in a shoot and passes to an incinerator.

Along one side of the main shed are the offices, repair shops, and stores, a single-storey building with a flat roof of pre-cast concrete hollow beams, carried on rolled-steel joists and covered with screening and asphalt. At one end of the office block is the canteen, and below this an A.R.P. shelter 100 ft. long by 40 ft. wide. The repair section is equipped with two 15-ton travelling gantry cranes. An outstanding feature of this shed is the wide use made of natural lighting; there are 4 sq. ft. of window to every 7 sq. ft. of floor space.

Another innovation will be the conversion at a later date to electric operation of the present chain-operated roller shutters which will be "push-button" controlled by the crew of a train about to enter the shed.

The cleaning shed is a brick building 450 ft. long by 58 ft. in width with three tracks. The roof covering is of corrugated asbestos and aluminium glazing carried on steel trusses. Here, also, the outside walls are faced with brown bricks, and the inside surfaces with white bricks. Bridge rails are laid on longitudinal timbers bolted down to continuous concrete bearers which form the side walls of the drainage channels between the rails of each track.

At the sides of the track the concrete floors are finished with granolithic covering. A car washing plant, similar to those used at Neasden and Hainault, also has been provided. All routine examinations and repairs of Central Line rolling stock will be handled at one or other of the Ruislip and Hainault depots, leaving only the heaviest overhauls to be carried out at the London Transport Acton Works. On Saturday last the entire equipment of Wood Lane Depot, 200 tons of machinery and stores, was moved in one day to Ruislip.

Eastern Extension

At the eastern end, the new sections, which were brought into service concurrently with the Western Extension, carry the Central Line on from Woodford to Buckhurst Hill and Loughton, and also complete the electrification of the northern half of the Hainault loop by bringing Roding Valley, Chigwell, and Grange Hill into the scheme. Whereas on the Ruislip extension new electrified tracks and new stations were constructed, the work at the eastern end in general has been one of electrifying the existing Eastern Region tracks, of installing automatic colour-light signalling, and of adapting former steam-line stations for electric train operation. At the same time the opportunity has been taken to renovate and improve these stations within the strict limits of "austerity." Electric lighting has been installed throughout, together with improved ticket-offices, waiting rooms, and staff accommodation.

At Grange Hill, where the station building was badly damaged during the war, a temporary ticket-office has been erected and connected to the platforms by a temporary footbridge. Later, when conditions permit, the damaged structure will be replaced by a completely new station.

Loughton Station was rebuilt just before the war, and work here consists only of minor redecoration. The new automatic colour-light signalling installation was brought into use at Loughton on the night of Saturday, September 25, replacing the

(Continued on page 617)

Further Central Line Extensions



The new Northolt Station on the Central Line extension to West Ruislip. The Western Region platforms have been closed and demolished

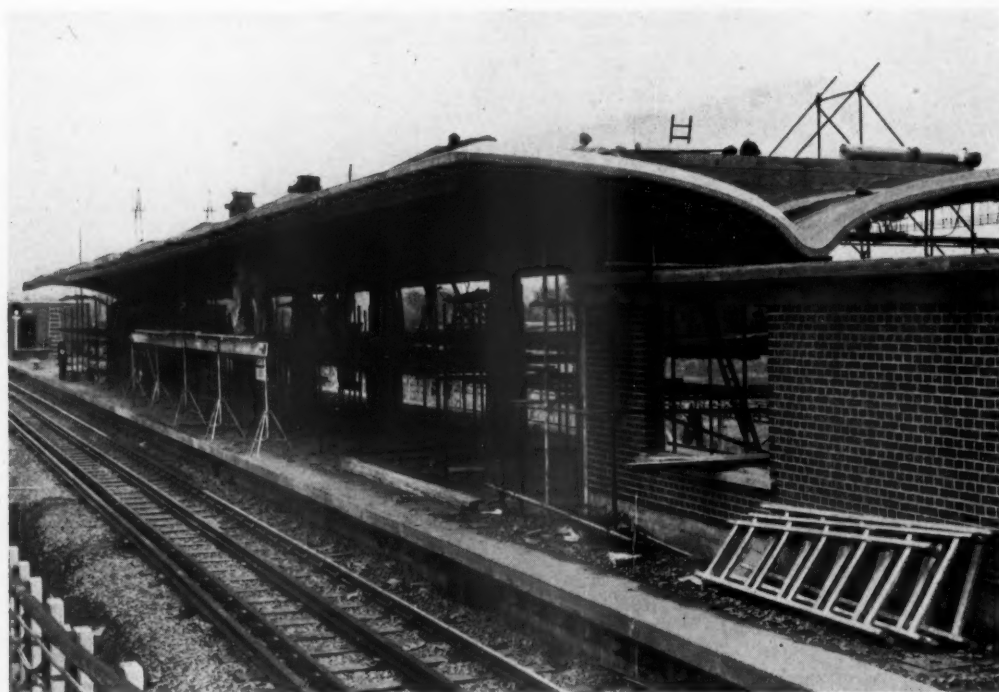


The Central Line 440-ft. island platform at Ruislip Gardens Station, with "butterfly shell roof" awning in reinforced concrete

Further Central Line Extensions



Ruston-Bucyrus excavator with drag line forming side slope of cutting near Northolt Station, on the Greenford-Ruislip extension. The contractor for the work was the Cleveland Bridge & Engineering Co. Ltd., Darlington



Butterfly (or double umbrella) roof at Ruislip Gardens Station approaching completion

Further Central Line Extensions



Laying cables at West Ruislip for standard London Transport colour-light signalling



Conductor rail welding at West Ruislip. Note new signal box in background

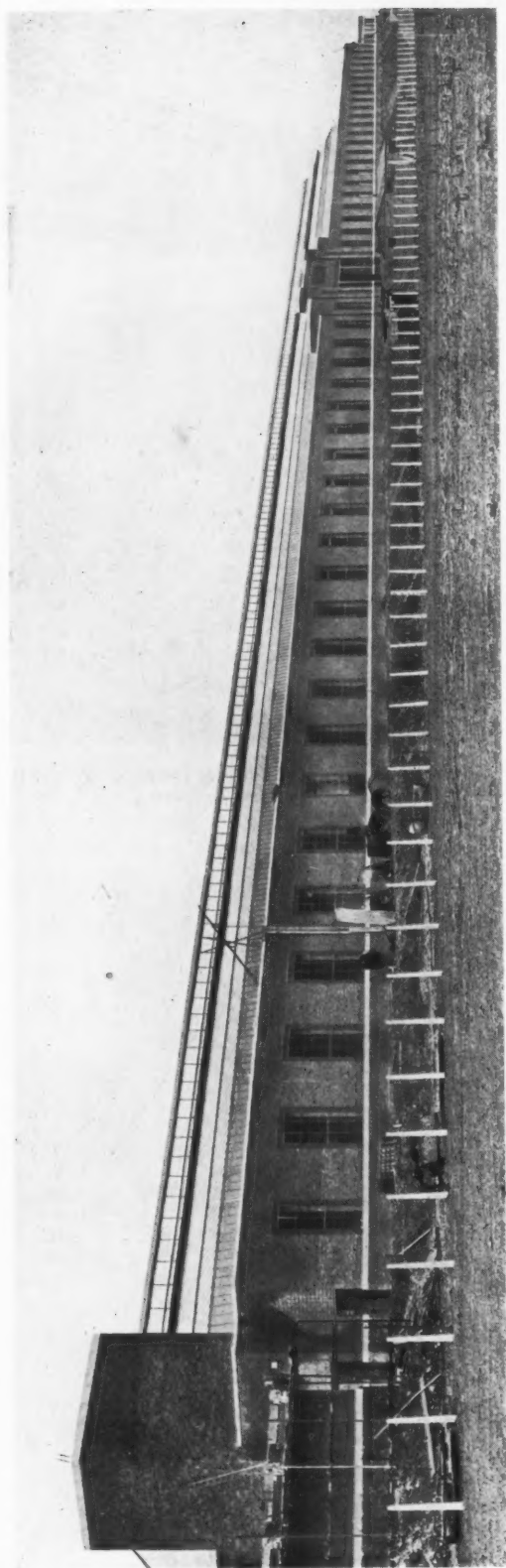


Repairing war damage at Grange Hill Station



Connecting-up colour-light signals at West Ruislip

Further Central Line Extensions



South elevation of the car shed at Ruislip



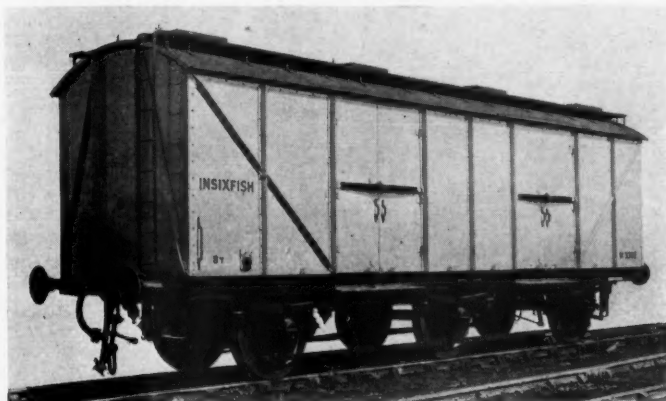
Two views of the interior of the car repair and examination shed at Ruislip depot. The rolling stock seen is some withdrawn from the Metropolitan and Central Lines, and replaced by new stock

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Fresh Fish Traffic, Western Region

Fifty insulated vans are to be built at Swindon for the Penzance to London and other routes



AS a result of experimental work carried out by the technical staff of the Western Region, British Railways, and the West Cornwall Fishermen's Council, to ascertain the best conditions under which fresh fish can be conveyed from Penzance to London, fifty insulated fish vans are now under construction at Swindon.

Routes Served

Some of these already are in service on the Penzance to London route, and between Milford Haven and London, and Milford Haven and Birmingham. The new vans are 31 ft. long, have six wheels, vacuum and hand brakes, and are fully equipped for running in fast services.

The vans are efficiently insulated by the inclusion of 3 in. of Onazote between the inside and outside panels, which are of

resin-bonded plywood forming the sides, ends, roof, and floor of the van body. The insulated body is supported by a steel body framing and is carried on a steel underframe constructed of rolled sections. The floor is finished with a composition non-absorbent material, and fitted with drain-traps to facilitate cleaning. Removable slatted wood mats laid over the floor permit free air circulation round the fish boxes.

The interior plywood walls of the van are treated with shellac and varnish to provide a clean and non-absorbent finish. Special attention has been paid to the sealing of the doors, the checks of which are fitted with rubber gaskets to form an air-tight seal, and when closed the doors of the van are held securely in position by means of a screw-operated clamping bar.

The exterior of the van is painted cream and black; the sides and ends are cream, and the underframe black. The lettering, door fastenings, and handles also are painted black.

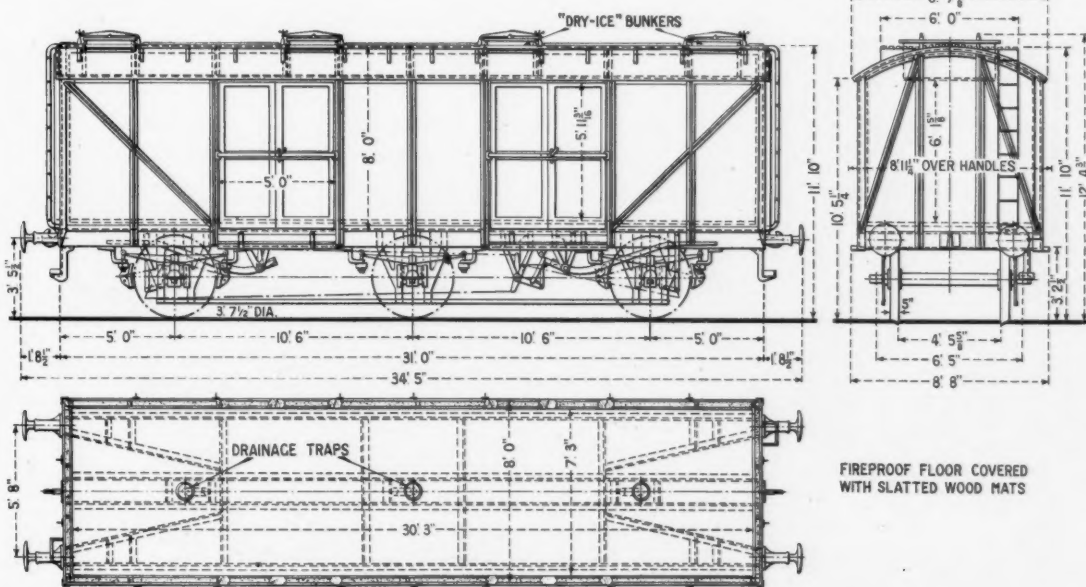
Method of Refrigeration

For purposes of refrigeration, four dry-ice bunkers are provided in each van, with a total capacity sufficient to maintain satisfactory conditions for the storage of fresh fish for periods up to 48 hours, which is necessary for week-end loadings. The sides and top of the dry-ice bunkers are insulated and the base is formed of large aluminium conductor plates to regulate the evaporation of the dry-ice. The dry-ice is loaded from the roof of the vans, and end ladders and roof platforms are provided for this purpose.

The tare weight of each insulated van is 16 tons 4 cwt., and the capacity of each van is 8 tons.



Interior of insulated fish van built at Swindon



The "Flying Scotsman" on the Berwick-Edinburgh Main Line



In our issue of October 29, there appeared an article describing the repair of damage on the main line from Berwick to Edinburgh caused by the August floods, and the photograph reproduced above shows the "Flying Scotsman" passing over temporary bridge No. 125 between Reston and Grants house on November 1

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RAILWAY NEWS SECTION

PERSONAL

Lord Rusholme has been elected Chairman, and Sir John Fisher, Deputy-Chairman, of the Coastal Shipping Advisory Committee, the names of the members of which were given in our November 12 issue.

Mr. D. M. Turnbull, District Traffic Manager, Swansea, London Midland Region, British Railways, who, as recorded in our November 12 issue, has been appointed Divisional Superintendent, Cardiff, Western Region, was educated at Warwick, and entered the service of the London & North Western Railway in 1907, in the Goods Department at St. Helens. In 1912

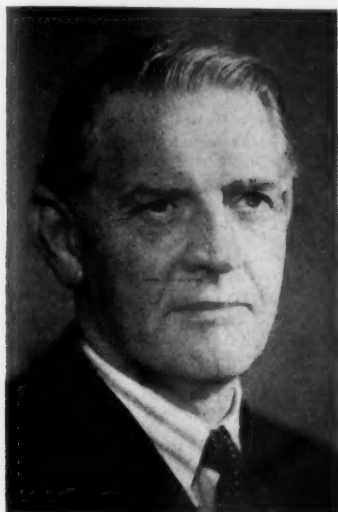
Special Representative of the President of the Canadian Pacific Railway, coming to take up his new post; his headquarters will be in London.

Mr. M. G. R. Smith, M.B.E., B.Sc., A.M.I.C.E., who has been appointed Assistant Civil Engineer, Western Region, British Railways, was educated at Clifton College and Bristol University, and served a pupilage with the Great Western Railway under two Chief Engineers, Mr. W. W. Grierson and Mr. J. C. Lloyd. In 1925 Mr. Smith was appointed a Junior Assistant and was employed on the construction of lines in the Swansea district and on the reconstruction of Swansea High Street Station. In 1928 he was appointed

Operating Superintendent, vice Mr. S. A. Fitch (appointed Assistant Operating Superintendent, London Midland Reg.on).

Mr. E. R. Hondelink, late Director-General of E.C.I.T.O., has been awarded the Gold Cross of King George I of Greece.

Lord Latham, Chairman of the London Transport Executive, has been nominated by the President of France an Officer of the Legion of Honour. Lord Latham was Chairman of London & Thames Haven Oil Wharves Limited from 1940 to 1947, and, through that company, for the same period, a Director of the Compagnie Industrielle Maritime.



Mr. D. M. Turnbull

Appointed Divisional Superintendent, Cardiff, Western Region, British Railways



Mr. M. G. R. Smith

Appointed Assistant Civil Engineer, Western Region, British Railways



Mr. A. N. Butland

Appointed Divisional Engineer, Taunton, Western Region, British Railways

he was appointed Outdoor Assistant to the Superintendent of the Line. During the 1914-18 war he served with the Royal Engineers, and was appointed Technical Officer in charge of No. 2 Armoured Train, stationed on the East Coast. In 1919 he returned to railway service as Outdoor Assistant to the Superintendent of the Line at Chester and Crewe, and in 1922 was made Assistant to the District Superintendent, Manchester. In 1924 he became Acting Assistant District Superintendent, Liverpool, L.M.S.R., and in the next year was appointed Assistant (Rules & Regulations), Chief General Superintendent's Department. Mr. Turnbull later became Assistant (Signalling), Chief Operating Manager's Office, and in 1945 he was appointed District Traffic Manager, Swansea.

The Railway Executive announces that Captain John Dudley Reed, Marine Superintendent, Western Region, British Railways, has been appointed Assistant Chief Officer (Marine), Headquarters, Railway Executive.

Mr. J. C. Patteson, European General Manager, Canadian Pacific Railway, recently returned in the Canadian Pacific liner *Empress of France*, after a short stay in Canada. Also on board was Mr. D. K. Buik, who has recently been appointed

Assistant in the New Works Drawing Office at Paddington, where he took an active part in the preparation of contracts and contract drawings for extensive Government schemes, namely, Bristol Temple Meads Station alterations and the quadrupling of the line between Olton and Rowington Junction. In November, 1930 he held the position of Acting Resident Engineer in connection with the latter work; and in May, 1931, he returned to London as Assistant to the Divisional Engineer, Paddington. In December, 1934, he was appointed Assistant Divisional Engineer, Cardiff, and in August, 1939, Assistant Divisional Engineer, Paddington. He was appointed Assistant to Chief Engineer in October, 1944, and Assistant Engineer (Maintenance) in July, 1946. In December, 1947, he became Divisional Engineer, Taunton, the position he vacates on his new appointment. Mr. Smith was made an M.B.E. in the King's Birthday Honours, 1945.

SOUTHERN REGION APPOINTMENTS

The following appointments are announced in the Southern Region, British Railways:

Mr. N. E. V. Brady, Western Divisional Engineer, to be New Works Engineer.

Mr. H. B. Taylor (hitherto District Operating Manager, London [Midland], London Midland Region) to be Assistant

Mr. A. N. Butland, O.B.E., B.A., B.Sc. (Eng.), A.M.I.C.E., Assistant to Chief Engineer (Maintenance), Western Region, British Railways, who, as recorded in our November 12 issue, has been appointed Divisional Engineer, Taunton, joined the Great Western Railway in 1924 in the Bridge Section, Chief Engineer's Office, and in 1930 was transferred to the staff of the Divisional Engineer, Cardiff. He returned to the Chief Engineer's Office, in the New Works Section, in 1935, and, after working on the scheme for a new line from St. Germans to Looe, was sent to the Greenford to Ruislip section of the North Acton to Ruislip quadrupling, first as Assistant Resident Engineer and later as Resident Engineer. In January, 1940, Mr. Butland was appointed Assistant Divisional Engineer, Taunton, and in May, 1947, was made Assistant to the Chief Engineer, and carried out the repairs to Strangford Viaduct. He was appointed Assistant to Chief Engineer (Maintenance) in November, 1947. Mr. Butland had been commissioned in 1930 in the Supplementary Reserve and posted to the 152 (G.W.) Railway Construction Company, R.E. He was mobilised on the outbreak of hostilities, and was demobilised in August, 1945, with the rank of Lt.-Colonel. He was mentioned in despatches, and was made an O.B.E. for services in North-West Europe.



Mr. N. C. Watney

Appointed Works Manager at the Indian Locomotive Construction Plant at Tatanagar

Mr. N. C. Watney, M.I.Loco.E., who, as recorded in our November 12 issue, has been appointed Works Manager at the Indian Locomotive Construction Plant at Tatanagar, served his engineering pupillage with Beyer, Peacock & Co. Ltd., Manchester, during 1922-24, and thereafter joined the Midland Railway. In 1926 he was appointed to the Indian State Railways as an Assistant Locomotive, Carriage & Wagon Superintendent, and was posted to the North Western Railway. He was transferred to the mechanical workshops at Moghalpura in 1929 as an Assistant Works Manager, and later Production Engineer, and in 1934 became Personal Assistant to Chief Mechanical Engineer. After serving as Divisional Locomotive, Carriage & Wagon Superintendent in 1935 he was recalled to headquarters as Organisation Officer to assist in workshop reorganisation, and thereafter became Works Manager. After a further period as Divisional Locomotive Superintendent in 1939 Mr. Watney was appointed by the Railway Board as Deputy-Director Mechanical Engineering. For a short period his services were lent to the War Transport Department of the Government of India, and he returned to the North Western Railway early in 1944 as Mechanical Engineer, Maintenance. Later, as Deputy Chief Mechanical Engineer, he initiated and directed a mechanical research section in the workshops, which resulted in a series of prototype all-steel all-welded coaching stock, as well as rehabilitation of existing carriages. In May, 1945, Mr. Watney was appointed Superintendent, Mechanical Workshops, but late in 1946 was temporarily attached to the Railway Board on special duty in connection with a project for building all-steel coaching stock in India. On partition, he retired as Superintendent, Mechanical Workshops, and he left Pakistan in March, 1948.

Mr. D. W. Harrison, District Goods & Passenger Manager, Nottingham, Eastern Region, British Railways, who, as recorded in our October 29 issue, has retired, was born in 1887, and joined the Great Central Railway in the Manchester District in 1902. He was appointed a higher-grade clerk in 1911, and subsequently served in the General Manager's



Mr. D. W. Harrison

District Goods & Passenger Manager, Nottingham, L.N.E.R., and Eastern Region, 1926-48

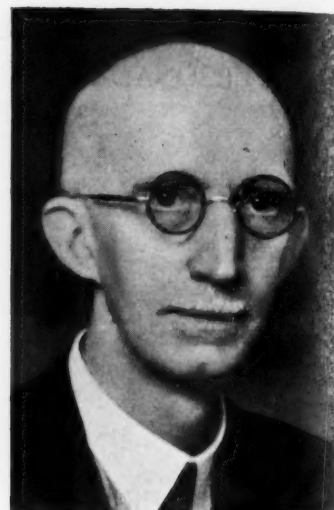
Office and in various departments in the Manchester, Sheffield and Grimsby districts. He later became Assistant District Traffic Manager in the London District Goods Manager's Office, and in 1924 was appointed Assistant in the Nottingham District Manager's Office. Mr. Harrison was appointed District Goods & Passenger Manager, Nottingham, in 1926. At a recent meeting of the district commercial officers of the Eastern Region the opportunity was taken to present Mr. Harrison with a cheque, to mark the occasion of his retirement. In making the presentation Mr. C. G. G. Dandridge, Commercial Superintendent, referred to Mr. Harrison's outstanding qualities as a district officer, and other tributes were paid by his fellow district officers and by Mr. W. E. Blakey, Assistant Commercial Superintendent.

Mr. S. F. Kneller has been appointed Deputy Chief Officer (General Haulage) at the headquarters of the Road Transport Executive.

We regret to record the death on November 10 of Mr. E. B. Vignoles, a Director of Evershed & Vignoles Limited.

Among awards made by the council of the Institution of Civil Engineers for the 1947-48 session is a Webb Prize to Messrs. C. E. Dunton and K. Brinsmead, M.M.I.C.E., jointly for their paper on "Design, Installation and Maintenance of Long Welded Rails." The special thanks of the Institution have been given to Mr. W. K. Wallace, M.I.C.E. (who, as a Member of Council, was not eligible for an award), for his paper on "Winter Conditions and the Civil Engineer: Railways."

Mr. R. J. Buchanan, who, as recorded in our October 8 issue, has been appointed Stationmaster, Edinburgh (Princes Street), Scottish Region, British Railways, entered the railway service as a telegraph messenger at Cummertrees in 1904, and was transferred to the clerical staff in the next year. He subsequently served at many stations on the Glasgow & South Western Railway in Ayrshire until appointed Stationmaster at Lugton in 1928. Three years later Mr. Buchanan was moved to



Mr. R. J. Buchanan

Appointed Stationmaster, Edinburgh (Princes Street), Scottish Region, British Railways

Pollokshaws, and, in May, 1940, to Johnstone. In July, 1944, he became Booking & Parcels Agent at Edinburgh (Princes Street).

Mr. J. D. Tattersall has been appointed Assistant Regional Solicitor, North Eastern Region, British Railways.

LONDON TRANSPORT EXECUTIVE

Mr. T. W. Towers, Operating Manager (Trams & Trolleybuses), has retired from the service of the London Transport Executive. Mr. J. B. Burnell, previously Operating Manager (Central Buses), has been appointed Operating Manager (Central Road Services), and will be responsible for tram and trolleybus as well as central bus operation. Arising out of these changes, Mr. P. G. Gibbins, previously Divisional Superintendent (South), (Trams & Trolleybuses), has been appointed General Superintendent (Trams & Trolleybuses).

DOCKS & INLAND WATERWAYS EXECUTIVE

With the approval of the British Transport Commission, the Docks & Inland Waterways Executive has made the following appointments:—

Mr. Trevor L. Davies (Accounts Officer, London Transport Executive) to be Financial Officer.

Mr. S. A. Finnis (Assistant Chief Regional Officer, North Eastern Region, Railway Executive) to be Chief Docks Manager, Humber Ports, on the transfer, on January 1, 1949, of Hull, Grimsby and Immingham Docks to the Docks Executive.

The Minister of Supply announced recently the appointment of a committee, composed as follows, to consider the possibility of reducing the variety of engineering products and components:—

Sir Ernest Lemon (Chairman), a former Vice-President of the L.M.S.R.; Sir Frank Ewart Smith (Deputy-Chairman), a Director of I.C.I. Limited; Messrs. Stanley Harley, Deputy-Chairman, Coventry Gauge & Tool Co. Ltd.; Jack Tanner, President, Amalgamated Engineering Union; T. H. Windbank, Director, Crompton Parkinson Limited; Secretary: Mr. E. G. Glass, Engineering Industries Division, Ministry of Supply.

Further Central Line Extensions

(Continued from page 608)

former mechanically-operated semaphore signals on this section of the line.

Responsibility for the work at the eastern end has been divided between the British Railways Eastern Region, London Transport, and the Essex County Council. Broadly speaking, the Eastern Region made all necessary alterations to existing running tracks and goods yards; the County Authority executed the work resulting from the elimination of the former level-crossings; and London Transport has been responsible for equipping the line for electric operation, for providing additional car sidings, and for renovating and adapting the steam-line stations.

Train Services

At the western end there is a 10-min. service throughout the day between West Ruislip and Greenford. The journey from West Ruislip to Oxford Circus takes 39 min.

From Loughton and Buckhurst Hill there is a 4-min. peak-hour service, with a 10-min. service at other times of the day. The direct journey time from Loughton to Oxford Circus is 40 min. On the loop line, a shuttle Central Line service is run between Woodford and Hainault, via Roding Valley, Chigwell, and Grange Hill, feeding the main sections of the line both at Woodford and Hainault. The service interval is 7½ min. in peak periods and 10 min. at other times.

Concurrently with the bringing into use of the new sections of line, a new Central Line timetable was introduced, giving an increase in the number of trains running in non-peak periods. Previously, during slack periods, a train was run every 4 min., with a few additional trains, on the most heavily used section of the Central Line between Marble Arch and Liverpool Street. From November 21 the service on this section was stepped up to give a regular 2½-min. headway outside peak hours.

Opening Ceremony

On Friday, November 19, two days before the beginning of public traffic, the new extensions were officially inaugurated by Mr. Alfred J. Barnes, Minister of Transport. The opening ceremony took

place at Greenford Station, after which the guests travelled non-stop by special train to West Ruislip. They returned to the Railway Hotel, Greenford, for a reception and speeches.

The Rt. Hon. Lord Latham, Chairman of the London Transport Executive, welcomed for yet another opening ceremony the Minister of Transport, Mr. Alfred Barnes, the third occasion on which he had attended the opening of an extension of the Central Line. That day marked the first formal opening of a railway extension in London since the nationalisation of transport, and it was fitting that they should have also with them Sir Cyril Hurcomb, Chairman of the British Transport Commission, and his colleagues. Lord Latham said that the extensions of the Central Line in the west and east constituted the largest section of the Underground opened on any single occasion for the last 31 years. It was surpassed in length only by the projection in 1917 of the Bakerloo Line for 12 miles alongside the then L.N.W.R. from Willesden Junction to Watford. The present extensions added 10 miles to the lines over which London Transport trains ran, and increased the total length of the network of lines served by London Transport trains to 243 miles and the total number of stations to 278. He emphasised that these Central Line extensions had been achieved through the closest co-operation and collaboration with the main-line railway companies and their successors, the Railway Executive. Indeed, it was the main-line companies and the London Passenger Transport Board which decided that these extensions were a necessary addition to the transport facilities in the London area and had gone some way in their construction when the war brought building construction of this nature to an end. He felt that all his colleagues would wish him to pay high tribute to the late Lord Ashfield, who played a notable and decisive part in the initiation of these extensions. In the west, the Great Western Railway and, later, the Western Region of British Railways, had been responsible for all civil engineering and architectural design and construction work. In the east, the Eastern Region of British Railways had made all the necessary alterations to running tracks and goods yards. On this side of London, the

Central Line would be extended to Epping next year.

Mr. Barnes also spoke at some length on the background of the present extensions, outlining their place in the general scheme of developments which constituted the "1935-40 New Works Programme" of the L.P.T.B., the G.W.R., and the L.N.E.R. The Minister paid tribute to the work of these organisations, and said that in large measure the Railway Executive and the London Transport Executive were reaping the benefit of work initiated and largely constructed under private enterprise, and brought to fruition since nationalisation.

Sir Cyril Hurcomb also recalled that much of the preliminary work was carried out by the former London Passenger Transport Board and the main-line companies. Foremost among those who saw and met these needs of London's expanding population stood Lord Ashfield, the great architect of London's transport system, whose presence was missed with an acute sense of loss on such an occasion. The British Transport Commission was fortunate in inheriting a most efficient Executive made ready to its hands in the form of London Transport, and was fortunate, too, in inheriting many close and effective working arrangements between the main-line companies and London Transport in regard to various suburban services. The Commission had reviewed these arrangements, which had now been further simplified, and additional sections had been transferred to the direct and complete control of the London Transport Executive.

Sir Eustace Missenden, O.B.E., Chairman of the Railway Executive, said it gave him very great pleasure to couple the name of the Railway Executive with that of the London Transport Executive in proposing a hearty vote of thanks to the Minister of Transport for having performed the ceremony. There had been a very close and happy association between the British Railways and London Transport in the development and completion of these extensions. The Railway Executive also had its own electrification scheme, the electrification of the lines from Liverpool Street and Fenchurch Street to Shenfield, and it looked forward to a similar occasion to mark the completion of this in about 12 months' time.



Left: Lord Latham inviting the Minister of Transport to declare open the West Ruislip extension, Central Line.
Right: The Minister at the controls of the inaugural train

Integration of British Transport

Sir Joseph Nall's views

Following Sir Cyril Hurcomb's paper on "Progress Towards the Integration of Transport" read before the Institute of Transport on November 15, and reported in *The Railway Gazette* last week, Sir Joseph Nall made a most interesting contribution to the discussion. Many of his points are debatable, but his remarks are well worth publishing in full. He said:

It is unfortunately true, as Sir Cyril Hurcomb has indicated, that the main-line companies, having purchased large interests in both passenger and goods road undertakings, did little or nothing to develop the opportunities they then secured, but one must not wholly blame the railways for that. There were, in fact, when the outbreak of war intervened, vitally important consultations going on, which, I believe, would have started a movement in the right direction had not the war intervened.

DIFFICULT ASPECTS OF INTEGRATION

Obviously, the most difficult aspects of integration arise on the goods or merchandise side of the Commission's problems, and the final settlement of the line dividing the spheres of the Railway and the Road Executives in this field will not easily or quickly be achieved, and may, indeed, have to be adjusted from time to time as trial and error, or success, will demonstrate.

It would sound easy enough to say the Road Executive should have control of all road vehicles and become the carting agent for the collection and delivery of all rail-borne goods, but that would involve a large-scale and immediate disintegration of a widespread and smoothly working system already in existence whilst dislocating the not inconsiderable volume of throughout road-borne traffic which the railways now deal with directly.

Alternatively, it would be possible to utilise the existing system of Railway District Goods Managers as the basis for controlling the operation of all freight services, and thus afford the trader the convenience of dispatching all his traffic through the one immediately available agency for dispatch by road or rail as may be most appropriate or be definitely selected by the trader.

One can think of town after town where the local railway station will be the most convenient centre on which to concentrate the control of the whole of the Commission's freight services serving that town.

Is it too revolutionary to suggest that the whole organisation of Railway Goods Managers with their yards or depots and staffs should be transferred to the Road Executive, who would then, in fact, become a fully established and comprehensive *Freight Executive*? This would leave to the Railway Executive the whole responsibility of running the trains in and out of the goods stations through the control of their existing operational superintendents. In this latter alternative lies the final solution of integration so far as merchandise freight is concerned.

Equally well, and following the precedent now well established by London Transport, might the whole of the passenger business be put into the hands of the Railway Executive. We never will get real integration in this field of transport if two separate agencies are to operate it. There is no real operational affinity between road passenger bus and road goods transport, and very few, if any,

undertakers have ever ventured to operate both on any large scale.

Nor must we forget the important problem of the Railway Parcel Service. In recent years it has become common form to find the platforms and carriage-ways of main-line stations cluttered up with masses of parcels which in size and quantity are indistinguishable from the smalls or sundries of the goods yards. Surely this cannot be allowed to go on. The day is long past when the sender of a parcel should be presented with the problem of paying a higher charge in the pious hope of a quicker delivery, or a lower charge with the certainty of a delayed delivery.

"GOODS TRAIN COMPLEX"

Here, indeed, is the need for a consolidation of rates and charges with corresponding organisation for dispatch by the quickest and safest means, whether it be by road vehicle or by passenger or so-called goods train. Some years ago I ventured to say to a meeting of the East Midland Section of the Institute that in the post-war years the railways would have to get rid of the "goods-train complex" and adapt themselves for time-table freight services. It is in this field of the parcel and so-called sundries that road transport firms have advanced far ahead of the railways because they have never recognised any need for a slower service at less cost to the user.

I would not leave this topic without referring to the parcel post with which it may well be desirable to achieve some measure of integration beyond merely conveying by rail such quantities of parcel post or mail traffic as the G.P.O. chooses to put on to rail. The General Post Office, indeed, can teach us quite a lot in the matter of organisation for quick transit and relative security against loss or theft.

It is not exaggerating to say that the G.P.O. has the most highly developed Zonal System for collection and delivery in Europe, embracing, as it does, every village and hamlet and almost every dwelling house.

In the passenger business the B.T.C. starts under heavy handicap of arrears, not only of maintenance, but of method. A large proportion of its present rail passenger traffic is fortuitous and temporary owing to the restriction of private motor-cars, which people will use in ever increasing numbers as soon as they get the opportunity, while the masses of the population, who now only think of travelling in terms of bus or coach, will not willingly revert to railway until the unpleasant elements of soot and steam are eliminated.

The greatest loss in regular all-year-round railway passenger traffic is in the suburban and inter-urban sections, and only electrification and clockwork regularity of services will regain it. Even then, it must be accompanied by a drastic clean-up of stations in which much more attention must be given to decreasing the distances passengers are often compelled to walk between the station entrance and the train they travel in.

PROGRESS IN LONDON

In London, much has been done by the London Transport Board and its predecessors, but this has been chiefly a large-scale amalgamation with the integration of like with like within the group,

bus with bus, tube with tube, until more lately with a link-up to certain main lines. The Southern Railway showed what could be done to retrieve suburban traffic by electrification and regularity, but paradoxically, except for its own terminal on the North Bank, there has been no physical link-up across the river, and the thousands of people who use Waterloo or London Bridge must tranship to another vehicle to reach their destination.

Here, at long last, is a chance to re-develop that "Cinderella" of the Southern Region, the Waterloo & City line, by a surface junction beyond Waterloo, an additional station at Blackfriars, and an extension beyond the Bank to Moorgate, whence it would join up with the tube to Finsbury Park, and so on, to Barnet.

Perhaps we may still see the fruition of the plans prepared by the Metropolitan Railway nearly 30 years ago for a tube from Baker Street to Victoria, with interchange stations at Bond St. and Green Park.

Why not use the existing tracks from Blackfriars High Level to Farringdon and Moorgate and beyond, or Blackfriars to Kings Cross and Barnet, St. Pancras and Cricklewood, etc., and thus relieve the pressure on terminals by the cross-town through running which facilitates headway for suburban working.

Similarly, the existing rail networks in and around the great conurbations of Birmingham, Manchester, Liverpool, and Glasgow, etc., can, with electrification, in due course be restored to a revenue-earning basis and make a great contribution to the dispersal of congested population.

These are only some of the problems now awaiting investigation, and decision for short-term or long-term programmes, as the case may be, before integration can be said to have really started.

The Proposed Severn Road Bridge

On October 21, the Minister of Transport visited Thurleigh, in Bedfordshire, where exhaustive wind-tunnel experiments are being carried out on a 52-ft. model of the proposed highway bridge over the River Severn, which is to have a main suspension span of 3,300 ft., flanked by two others each of about 1,000 ft. Only the Golden Gate and George Washington suspension bridges in the U.S.A. will have larger spans, namely 4,200 ft. and 3,500 ft.

The Minister first saw the model fitted with decking similar to that of the ill-fated Tacoma Narrows suspension bridge, which collapsed in 1940 in a 40 m.p.h. wind. The alarming vibrations that culminated in its destruction were reproduced in the model under test. Improved decking was then fitted, with better results.

Experiments have been going on for some years both at Teddington and in the United States, and conclusions have been pooled. Gradually the form of deck construction—which appears to be the critical consideration—most likely to be safe has been evolved, and a model built accordingly, for wind-tunnel tests with the equivalent of wind speeds up to 140 m.p.h. When this model has been approved, a final one embodying all improvements found desirable in the existing one, and more closely akin to the final Severn Bridge design, will be built and tested. The Consulting Engineers for the design and construction of the bridge are Messrs. Mott, Hay & Anderson in association with Messrs. Freeman, Fox & Partners.

Cambridge Buffet Expresses Restored

Commencing Monday, December 6, a service of buffet car expresses, similar to those in operation before the war, will be reintroduced between Kings Cross and Cambridge. There will be four trains each way on weekdays, running as shown below, and each will carry the name "Cambridge Buffet Express":—

		SX	SO		
		a.m.	p.m.	p.m.	p.m.
Kings Cross ...	dep.	9.35	12.05	2.25	8.30
Welwyn Garden City ...	"	10.07	12.37	2.57	9.02
Hitchin ...	arr.	10.24	12.53	3.14	9.19
	dep.	10.26	12.54	3.16	9.21
Letchworth ...	"	10.32	1.00	3.22	9.27
Baldock ...	"	10.38	—	—	9.33
Royston ...	"	—	1.17	1.32	—
Cambridge ...	arr.	11.05	1.37	1.52	3.53
* Arrives 12.44 p.m.					
		a.m.	p.m.	p.m.	p.m.
Cambridge ...	dep.	9.27	12.10	3.25	5.25
Royston ...	"	9.48	—	—	—
Baldock ...	"	—	—	—	5.53
Letchworth ...	"	10.05	12.41	3.57	5.59
Hitchin ...	arr.	10.11	12.46	4.03	6.04
	dep.	10.15	12.48	4.04	6.06
Welwyn Garden City ...	dep.	10.33	1.09	4.23†	6.25
Kings Cross ...	arr.	10.57	1.38	4.47†	6.52

† On Mondays, Fridays and Saturdays departs Welwyn Garden City 4.26, and arrives Kings Cross 4.53 p.m.

In the case of the 12.05 p.m. (SX), 12.15 p.m. (SO) from Kings Cross and the 9.27 a.m. and 3.25 p.m. from Cambridge, the buffet car service will be replacing existing services. Consequent on the introduction of the buffet car expresses, also, certain alterations will be made to other train services, and the most important of these are given below:—

10.40 a.m. Kings Cross to Cambridge	Will be discontinued
2.15 p.m. Cambridge to Kings Cross	Will run 10 min. earlier on Mondays to Fridays
11.40 a.m. Kings Cross to Welwyn Garden City	Will depart 20 min. later and be extended to Welwyn Garden City
1.15 p.m. Hitchin to Cambridge	Will depart 13 min. earlier and terminate at Baldock
7.30 p.m. Kings Cross to Hatfield	Will depart 30 min. earlier
7.53 p.m. Kings Cross to Cambridge	Will start from Baldock at 11.33 a.m.
8.00 p.m. Kings Cross to New Barnet	Will start from Baldock at 12.15 p.m.
11.18 a.m. (SO) Royston to Kings Cross	Will depart 13 min. later
11.58 a.m. (SX) Royston to Kings Cross	Will depart 10 min. earlier
1.35 p.m. Cambridge to Kings Cross	Will depart 25 min. later
4.00 p.m. Cambridge to Kings Cross	Will depart 25 min. later
5.25 p.m. Cambridge to Kings Cross	Will depart 25 min. later
9.23 p.m. (9.30 p.m. Fridays only) Hatfield to Kings Cross	Will start from Welwyn Garden City at 9.15 p.m. (9.30 p.m. on Fridays)

General Electric Co. Ltd.

At the annual meeting on October 21, Sir Harry Railing, the Chairman, stated that the company's trading profits were substantially higher than in 1947, a result for which increased turnover, a return to more normal production, and the fact that 1947 profits were affected adversely by the fuel crisis of that year, were responsible. Because of heavy taxation, it was becoming increasingly difficult to provide out of savings the reserves ultimately necessary for capital replacement, let alone modernisation.

Orders received represented a further considerable increase in capital and consumer goods, but in consumer goods there had been a decline during the latter part of the financial year, mainly because the British Electricity Authority did not encourage the increased use of electricity and had curtailed orders itself. Satisfactory results last year had been the result largely of increased turnover, achieved by increased production in existing works and the new works in Lancashire, Durham, Yorkshire, and Walsall.

Many contracts were in hand for recti-

fier equipments, both in this country, the Dominions and the Continent for railway and industrial services. There was a steady demand for traction equipment both for home and overseas. The Ceylon Government Railways had ordered diesel locomotives, and the Portuguese Railways electric locomotives. Repeat orders had been received for rolling stock for the London tubes. Signalling contracts on hand included the South African and Rhodesian Railways.

Total shipments in 1946-47 represented an advance of 83 per cent. on 1938, and in 1947-48 an advance of 177 per cent. The present monthly average rate of shipment represented an advance of 247 per cent. on 1938, considerably higher than the target for the export of electrical goods for 1948, set by the Chancellor of the Exchequer at 184 per cent. above 1938. Production of cheap electricity would be the keystone for our future industrial productivity, as that of cheap coal was in the nineteenth century.

San Paulo (Brazilian) Railway Company

The annual general meeting of the San Paulo (Brazilian) Railway Company was held in London on November 16, Mr. G. M. Booth, Chairman, presiding.

Mr. Booth said he hoped that by mid-June next the company would have repaid its preference stock and a portion of its ordinary capital. There might be further long delays before their final position with the Brazilian Government could be cleared up. It was intended to continue operation of the road motor service and administer the various properties in Brazil.

The Brazilian Government was still considering their claim for unrecognised capital before submitting it to the Legislative Assembly. Consequently, it was proposed that the capital be adjusted for the eventual purpose of either development of the properties, or realisation, if and when profitable. This, the Chairman stated, would be achieved by repaying preference and debenture stocks and by a partial repayment of the ordinary capital, which would be reduced to an amount sufficient to operate the undertaking and carry out developments. As and when payment was received for any part of the claims, further distributions would be made.

A sum of about £1,400,000, due to the company for purchase of equipment since 1946, was divided into two parts. Reimbursement was expected shortly of £988,000 which already had been expended. The money, which was required to carry through the board's scheme, should be in London within 30 days. The remaining sum was represented by goods which had not yet been shipped.

It was almost impossible to assess the other assets of the company, which had tried to sell some of its property in Brazil, but the Brazilian Government had embargoed the deals because it disputed the company's right to title. There would have to be steady pressure of negotiations, and perhaps, ultimately, a lawsuit. It had taken two years to get the payment for recognised capital, and if the sum of £980,000 for reimbursement of capital expenditure was received, a repayment of ordinary stock could be made, but it was not known whether that sum would be received before the middle of next year.

The company had been assured on several occasions, stated the Chairman, that the road transport undertaking also would be acquired, and for that reason it had been continued as a feeder for the railway, although it was running at a loss. The Brazilian Government had decided recently, however, not to proceed with acquisition, so the company would claim for accumulated losses, at present about £6,000 a month, since expropriation of the railway in 1946. Eventually their properties in Brazil should be valuable, but the time seemed a long way off.

Record Production by United Steel Companies

At the annual meeting of the United Steel Companies on November 17, Sir Walter Benton Jones, Chairman & Joint Managing Director, said that those who urged the nationalisation of the steel industry seemed to imagine it as a single thing. In reality nothing could be more false. The steel industry comprised a very large number of industrial and commercial undertakings making thousands of things for home and abroad. Nationalisation of steel meant expropriation of the property of thousands of persons and disturbance in the lives of thousands of operators. Its object was obscure.

THE STEEL BILL

Since he prepared his address the Iron & Steel Bill had been published. It differed in principle from previous nationalisation measures which applied to a clearly defined class of enterprises. Previous nationalisation schemes had applied to what might be called services. The present Bill was the first nationalisation scheme designed to acquire what might be regarded as a single industry. It was also the first scheme which had for its object the expropriation of selected companies or firms.

For these two reasons if for no other the Bill should be strenuously opposed by all who were concerned to maintain industry in the hands of free enterprise.

The fixing of the rate of compensation by reference to Stock Exchange quotations on certain dates repeated the method of fixing compensation in the case of transport and electricity. This was arbitrary and unfair because the exchange quotations were the records of prices paid to willing sellers of stock who wished for personal reasons to liquidate their holdings. The amount of stock sold in this way was relatively small.

The fact that the British Iron & Steel Corporation might keep in being the companies it would acquire, might suggest at first sight that the Bill was not a nationalisation measure. This was an illusion.

Those who supported the Socialist creed were carrying into effect the nationalisation of British industry, and if this Bill became law it was just another step along

a road which might have no end. Those who held the view that nationalisation is bad for British industry must oppose the Iron & Steel Bill.

Their production of steel ingots in the 12 months ended June 30, 1948, was 1,896,229 tons, which was 11 per cent. higher than in the previous year and was a record. Steel production of the United Kingdom in the same 12 months was the highest ever recorded, namely, 14,307,500 tons, compared with the highest pre-war production of 12,984,000 tons in 1937. The contribution made to this record by their company was equivalent to 13½ per cent.

There was no reason why these rates of production should not continue, and even increase, provided adequate supplies of suitable coking coal and scrap were available.

STANDARD SCREW THREADS.—Thirty years of intermittent negotiations ended on November 18 with the signing of an agreement to standardise all screw threads made in Great Britain and Canada and in the U.S.A. Firms in this country will make all their nuts and bolts to identical patterns as regards size, number of threads per square inch, angle of threads, etc., which will make machine parts of British or American manufacture interchangeable.

Parliamentary Notes

Railway & Canal Commission (Abolition) Bill

The Lord Chancellor (Viscount Jowitt), moving the second reading of the Railway & Canal Commission (Abolition) Bill in the House of Lords on November 9, said its main object was to effect economy by abolishing the Railway & Canal Commission and transferring to existing courts and tribunals the Commission's present functions, now much less onerous than formerly.

The Commission had been established under the Railway & Canal Traffic Act, 1888. Of the jurisdiction originally conferred on it there now remained virtually nothing. Section 75 of the Transport Act, 1947, had deprived the Commission of its jurisdiction in all matters relating to railways and canals except for railway rating and a few minor functions in Northern Ireland; and the jurisdiction in railway rating had now been taken from it by Section 85 of the Local Government Act, 1948. The Commission had, in addition, jurisdiction with regard to working facilities and support, and other matters connected with the mining industry; also a miscellaneous jurisdiction to decide disputes about postal and telegraph services, the placing of electric lines along railways, the supply of water in the Metropolis and the continuance in possession and compulsory acquisition of land requisitioned during the first world war. It had at one time been very busy, but the establishment of the Railway Rates Tribunal by the Railways Act, 1921, had deprived it of the greater part of its work relating to railways. By 1933 the number of cases heard by the Commission had so declined that a Bill had been introduced into the House of Lords to provide for its abolition and the transfer of its functions. That Bill had been given a second reading, but had then been dropped because there did not appear to be any prospect of obtaining general agreement, and because of pressure on Parliamentary time.

The two Commissioners appointed by the Home Secretary had received £3,000 a year each, but one of them had retired

in September of last year. The remaining Commissioner, Lord Maenan, had served as a Commissioner of the Railway & Canal Commission since February, 1930. He had taken office at a date when many lesser men would have thought of retiring. Lord Maenan had won and retained the affection and regard of all members of the profession who had practised with him and who had had the privilege of practising with him while the Commission was sitting. The Bill as drafted contained no provision enabling the Treasury to make compensation, such as he understood would be normal and usual, by reason of loss of office; and he thought that to include such a provision in the Bill in that House would probably involve a breach of privilege. He had reason for understanding that such a provision would not be unfavourably looked at in the House of Commons, and might even commend itself to the Treasury. He hoped, therefore, that whatever was fair and proper would be done before the Bill reached the Statute Book. The officers of the Commission comprised a Registrar and Secretary, who could be absorbed into other departments of the Royal Courts of Justice.

Lord Llewellyn said it was clearly right to abolish a tribunal which had not enough work left to justify its existence. Whether the new Railway Transport Tribunal would be as satisfactory a body as the Commission had been over the years, remained to be seen.

Lord Maenan, who is 94 years of age, said that, although he was the last remaining Commissioner, the breaking of a connection of 19 years was rather sad. He thanked the Lord Chancellor for what he had indicated might be done by way of compensation; but, even if he had none, he would willingly assent to the end of that Court. It had ceased to be useful and, therefore, in the interests of the nation, should no longer exist.

Viscount Addison associated himself with the tributes which had been paid to Lord Maenan.

The Bill was read a second time and committed to a committee of the whole House.

Special Roads Bill

The Special Roads Bill was given an unopposed second reading in the House of Commons on November 11.

In the course of moving the second reading, Mr. Alfred Barnes (Minister of Transport) said the proposal to build special roads represented a significant change in the highways policy. On an average, the cost of a motorway would work out at about 15 per cent. a mile less than that of an all-purpose road, and it would occupy or use roughly 10 per cent. less land. The complete plan visualised amounted to no more than 1,000 miles of motorways, or approximately only 1 per cent. of the total mileage of trunk and classified roads.

Mr. Barnes considered that today, when they were prevented from building new roads, one could best serve the national interest by getting the power required to solve the problem, to get on with the preliminary work, and to have everything ready; because the problem was so urgent that, when the necessary finance was there, the Minister then responsible to Parliament could get on with the job at once. In this country we were hopelessly in arrears. Sooner or later the problem must be tackled, unless we were to be choked to death by the motor vehicles on the highways.

Sir David Maxwell Fyfe (Liverpool.

West Derby—C.) said the Opposition ought to co-operate in giving the Bill a second reading. He was told that, as far as the saving of time was concerned, there should be an increase of speed from the average of 24 m.p.h. for light vehicles, and 16 m.p.h. for heavy vehicles, to something like 50 m.p.h. on the roads. Saving in fuel would result from the decrease in the number of stops, and reduction in low-gear work. A large proportion of accidents could be prevented by the removal of road defects.

Questions in Parliament

Dock Charges

Mr. Stephen Davies (Merthyr Tydfil—Lab.) on November 1 asked the Minister of Transport if he would take immediate steps to place dock charges in the South Wales ports on a par with those at Liverpool and London, particularly in view of the fact that the present rates in South Wales militated against greater use being made of its ports.

Mr. L. J. Callaghan (Parliamentary Secretary, Ministry of Transport), in a written answer, stated: The docks at the principal ports in South Wales are vested in the British Transport Commission and the question of dock charges is one for its consideration. There are, however, other factors involved, one of the most important of which is the division of charges in the ports between shipper and shipowner. This is essentially a commercial matter, but the Minister of Transport is inviting the interests concerned to consider it.

Traffic at South Wales Ports

Mr. Stephen Davies (Merthyr Tydfil—Lab.) on November 1 asked the Minister of Transport if he had considered the recent decision of the Birmingham Chamber of Commerce urging that far greater use should be made of the South Wales ports of Cardiff, Barry and Swansea, because of the congestion and delay at certain English ports; and if he would make a statement on the position in the ports.

Mr. L. J. Callaghan stated in a written answer: The Minister of Transport has seen references in the press to the recent discussion in the Birmingham Chamber of Commerce. The Working Party on the Turn-Round of Shipping commended to exporters, the possibility of saving time by the greater use of ports not working to full capacity, and the Minister has asked them to consider what practical steps they can take to give effect to this recommendation. I am glad to say there has been an increase in both the coal and the general cargo traffic handled through Cardiff, Barry and Swansea this year compared with the corresponding period in 1947.

Applications for "B" Licences

Mr. John Lewis (Bolton—Lab.) on November 8 asked the Minister of Transport if he was aware that applicants for "B" licences were being called on by the licensing authority for goods vehicles to provide verbal evidence of consumers' need; and, in view of the difficulty of providing that evidence, whether he would take steps to make affidavits acceptable to the authority.

Mr. Alfred Barnes: I have no authority to interfere with the discretion of the licensing authorities for goods vehicles to require such evidence of need as they consider necessary. An appeal against the decision of a licensing authority lies only

to the Appeal Tribunal set up under the Road & Rail Traffic Act, 1933, which in a recent case expressed the view that written evidence of need is generally of little value.

Mr. Lewis: Is the Minister aware that, although written evidence may be of little value, with which I agree, applicants who go before the licensing authority are called on to bring with them their potential customers, who are not prepared to leave their own businesses to give evidence on consumers' needs? In the circumstances, why could not a sworn affidavit be acceptable to the licensing authority?

Mr. Barnes: The chairmen of these licensing authorities usually give an indication to the applicants of the procedure to be followed in these cases, and I have no jurisdiction to direct them.

Mr. Lewis: Is the Minister aware that these are cases in which one would think that a sworn affidavit would be acceptable, and will he make representations to the licensing authorities on what they should do in the matter?

Mr. Barnes: Evidence of that kind would be given proper consideration, but it does not follow automatically that it would ensure the granting of a licence.

British Railways and Foreign Currency

Commander Douglas Marshall (Bodmin—C.) on November 16 asked the Chancellor of the Exchequer what was the amount of foreign currency which he had so far permitted British Railways to expend on the chartering of vessels from foreign countries.

Sir Stafford Cripps (Chancellor of the Exchequer): It would not be in the public interest to disclose the amount of foreign exchange allowed to individual persons or undertakings, and I regret therefore that I cannot furnish this information.

Civil Servants in Nationalised Undertakings

Mr. F. J. Erroll (Altrincham & Sale—C.) on November 11 asked the Financial Secretary to the Treasury how many permanent civil servants had taken up appointments on the staffs of nationalised undertakings since January 1, 1946.

Sir Stafford Cripps (Chancellor of the Exchequer): One hundred and twenty-one.

Mr. Erroll: Are these men being transferred to show that nationalised undertakings are run on business lines?

Sir Stafford Cripps: These men are transferred because the nationalised undertakings wish to have these particular persons, and they wish to go.

Wages and Salaries in Nationalised Industries

Lt.-Colonel Sir Thomas Moore (Ayr Burghs—C.) on November 9 asked the Prime Minister if he was aware of the disparity in wages and salaries now received by employees in the nationalised industries as compared with the remuneration received when those industries or services were privately owned; and if he would set up an inquiry into the situation.

The Prime Minister (Mr. C. R. Attlee): The answer to the first part of the question is that there have been variations in wages and salaries in industry generally in the period during which certain industries have been nationalised. The answer to the second part is "No, Sir." In accordance with the policy of the Government the determination of terms and conditions of employment is the responsibility of the two sides of the industry concerned.

Sir Thomas Moore: Can the Prime Minister explain why a head waiter in a nationalised railway hotel with 25 years

service and 15 years service in that grade has his pay reduced from £10 a week to £3 17s. 6d. a week without any warning whatsoever, and why a hospital secretary across the road has his pay increased from £400 a year to £1,250 a year under nationalisation? The thing is inconsistent.

Mr. Attlee: Like the head waiter, I have had no warning of this (laughter).

Transport Consultative Committees

Mr. W. McAdam (Salford North—Lab.) on November 15 asked the Minister of Transport what progress was being made in regard to the setting up of the consultative committees provided for under the Transport Act.

Mr. Alfred Barnes: I have now received nominations from the representative bodies which I have consulted in connection with the establishment of the Central Transport Consultative Committee. I expect to be in a position in the very near future to announce the setting up of the central committee and the names of the chairmen of the committees for Scotland and Wales.

Mr. McAdam: Will the Minister speed up the appointment of these committees in view of the fact that the British Transport Commission is already engaged in large schemes of reorganisation, and that the consultative committees ought to have a say in such reorganisation?

Mr. Barnes: The important thing, of course, is to get the right people.

Steel Companies' New Capital

Mr. F. J. Erroll (Altrincham & Sale—C.) on November 15 asked the Minister of Supply in what way a steel company might now finance an urgent approved project for which a public issue of new capital would have been made.

Mr. George Strauss: All the normal ways of raising new capital are still open to a steel company. The British Iron & Steel Corporation will be liable for all debts to banks or other creditors of those companies whose shares it will acquire, and subscribers to new issues of securities will receive compensation equal to the price of issue.

Mr. Erroll: Does the Minister think that it is very likely the public will subscribe to those new issues?

Mr. Strauss did not reply.

Iron and Steel Subsidies

Mr. G. Wadsworth (Buckrose—Lib.) on November 8 asked the Minister of Supply what was the amount of subsidies of which the iron and steel trade had had the benefit in 1945, 1946 and 1947.

Mr. George Strauss (Minister of Supply) stated in a written answer: Figures are not available for 1945. During the year ended March 31, 1947, the total Government expenditure on subsidies for iron and steel was about £11,250,000, and during the following year about £11,500,000. The difference between the cost of imported pig iron and steel and the controlled price in this country accounted for £3,800,000 and £3,600,000, respectively, of these payments.

Surplus Machine Tools

Captain John Crowder (Finchley—C.) on November 15 asked the Minister of Supply whether he would now discontinue the sale by auction of surplus machine tools which would be required for essential production in the event of the outbreak of war.

Mr. George Strauss (Minister of Supply): No machine tool is sold if it is required as

a reserve or for other Government purposes.

Captain Crowder: Did the Minister read the article in the *Daily Graphic* of last Saturday which was headed "Our War Tools for the Iron Curtain"; and, further, is there any restriction on the export of machine tools bought by auction?

Mr. Strauss: Yes, they are all subject to restriction and come under a Board of Trade Order.

Mr. F. J. Erroll (Altrincham & Sale—C.): Is the Minister aware that a number of machine tools are finding their way to Palestine by similar devious channels?

Sir Waldron Smithers (Orpington—C.): Will the Minister undertake that none of these machine tools will be sent to Russia?

Mr. Strauss: I have said that no machine tools required in this country for reserve, and, indeed, none required for making munitions, are exported.

"C" Licences

Flight-Lieutenant John Haire (Wycombe—Lab.) on November 15 asked the Minister of Transport if he was aware that many road-haulage contractors were suffering considerable reduction in traffic as a result of the greatly increased issue of "C" licences; and what steps he proposed to take to protect their rights to adequate compensation when taken over by the Transport Commission.

Mr. Alfred Barnes stated in a written answer: A trader has always been and still is free to take out a "C" licence to carry his own goods in his own vehicles, and the law gives no protection to road or rail carriers against any loss of traffic which they may suffer in consequence. I have no information as to the extent of any such losses by hauliers, but, if an undertaking to be acquired by the Commission has lost traffic in this way, I can see no reason why such losses should be disregarded in assessing compensation. This must be based on the facts as they are at the material time.

Rolling Stock for Nigerian Railways

Air Commodore A. V. Harvey (Macclesfield—C.) on November 10 asked the Secretary of State for the Colonies how many locomotives and goods trucks had been supplied to Nigerian railways since January 1, 1946.

Mr. A. Creech Jones (Secretary of State for the Colonies): Thirty-four main-line and seventeen shunting locomotives, and 50 goods wagons, have been supplied to the Nigerian railways since January 1, 1946.

Railway Transport in Nigeria

Mr. Edward Davies (Burslem—Lab.) on November 10 asked the Secretary of State for the Colonies how far the railway transport had recently improved in Nigeria as a result of the availability of more locomotives and wagons; and what progress had been made in reducing the arrears in the movement of groundnuts.

Mr. Creech Jones: Although the position on the Nigerian Railways will not be satisfactory until further locomotives and wagons now on order are delivered, there has already been an improvement, especially since twenty new locomotives came into service in June. The railways' capacity for moving groundnuts has increased from about 18,000 tons a month to a figure, which it is now hoped to maintain, of about 30,000 tons a month. Stocks of groundnuts in the Kano area, which were 267,000 tons at the middle of June, were 162,600 tons at the end of last month.

Notes and News

Railway Sidings Designer Draughtsman.—Applications are invited by Imperial Chemical Industries Limited for a railway sidings designer draughtsman at its Wilton Works on Tees-side. See Official Notices on page 623.

Mechanical Engineer Required.—A firm of consulting engineers in London requires a fully qualified mechanical engineer capable of taking charge of inspection and advisory services. Experience in rail traction an advantage. See Official Notices on page 623.

Locomotive Draughtsman Required.—A locomotive draughtsman is required by the Iraqi State Railways for a tour of three years in the first instance. Candidates must have served an apprenticeship in the workshop of a British railway or firm of locomotive builders, and have a good knowledge of modern steam locomotive design and construction. See Official Notices on page 623.

Debating Societies' Joint Meeting.—There will be a joint meeting of two British Railways debating societies on December 9, when the Western Region London Lecture & Debating Society and the Southern Region Lecture & Debating Society will discuss: "That a Lifetime spent in the Employment of a Railway tends to Produce a Narrow Outlook on Life." The debate will be held at the Central Hall, Westminster.

Transport Securities.—The Stock Exchange Share & Loan Department has been advised that all the accounts of British Transport stock on the registers kept by the under-mentioned bodies, representing stock arising from the conversion of the former securities, have been passed to the Bank of England:—

Calder & Hebble Navigation
Shropshire Railways
West London Railway

All correspondence in respect of the above accounts, therefore, should be addressed to the Bank of England, 18, Finsbury Circus, E.C.2.

Southern Region Staff Conferences.—Continuing his policy of talking things over with the staff, Mr. John Elliot, Chief Regional Officer, Southern Region, accompanied by Mr. W. P. Allen, Member of the Railway Executive, held the first of a further series of regional conferences with all grades of the staff, at the Aquarium, Brighton, on November 19. This is the second such conference to be held at Brighton, the first being in February of this year. Mr. Elliot, who was supported by the heads and principal assistants of all departments of the Region, invited suggestions and opinions for improved working and better public service.

Electric Rivet Heaters.—Standard Resistance Welders Limited, Halesowen, Birmingham, has produced a new type of electric rivet heater operating by the resistance method. The design of the heater, which is available in light and heavy types, is based on experience gained over many years and embodies special features to facilitate adjustment for varying rivet lengths. The main frame of the heater is of welded-steel construction to withstand heavy shop usage and can be fitted with both wheels and eye bolts for lifting. The machine heads are non-ferrous castings ribbed to give the maximum air cooling with minimum oxidation. The laminated copper secondaries are clamped to the

heads away from the heat zone. The light type of rivet heater has one or two heads and capacities up to 12 kVA., covering the smaller sizes of rivets of $\frac{1}{4}$ in. \times $\frac{1}{2}$ in. dia. in lengths up to 2½ in. The heavy type is made with capacities of 16-40 kVA., with one, two, or three heads, for use on rivets from $\frac{1}{4}$ in. \times $\frac{1}{2}$ in. to either $\frac{1}{2}$ in. \times 6½ in., $\frac{3}{4}$ in. \times 6 in., 1 in. \times 4 in., or their equivalent in weight. The maximum distance between the fully opened electrodes is 7 in.

Vocal and Instrumental Concert.—The London Midland Region (London) Orchestral Society will present a vocal and instrumental concert at 7.15 p.m., on Friday, December 3. The concert will be held in the Shareholders' Meeting Room, Euston, and the programme will include Dvorak's "New World" symphony and Beethoven's overture "Egmont."

L.M.R. Sheep and Cattle Traffic.—A total of 118,500 sheep was carried by the London Midland Region of British Railways during the five weeks ended October 24, 37,000 more than during the same period of 1947. There was also an increase in cattle carried during this period, when the 1947 total was exceeded by 5,000, nearly half of which were cattle landed at Heysham from Ireland.

Push-Button Door Control on the Central Line.—London Transport reports that the push-button underground doors installed experimentally on the Central Line have proved a success. It is expected that all trains on this line shortly will be equipped with the system. Travellers in general picked up the idea after a few days, and children were particularly quick in learning the technique. This new system, which was referred to in our October 22 issue, enables travellers to open an individual train door at non-tunnel stations instead of the guard having to open all the doors.

Thomas Ward Limited.—Initial, consolidated accounts of Thomas Ward Limited for the year ended June 30 show trading profits of the group at £1,654,687 and total income £1,894,645. After providing for depreciation, debenture interests, etc., and setting aside £854,726 for taxes, there remains a £759,507 balance. Of this, £146,889 is absorbed by allocations, including £63,000 for replacement of fixed assets, £25,000 for pensions, and £42,389 further reserve for future taxation consequent on a change in the accounting period of certain subsidiaries. The distribution on the ordinary shares is maintained at 15 per cent., and, after transferring £260,000 to general reserve, the balance carried forward is increased from £167,939 to £309,179.

Southern Region Lecture & Debating Society.—British Railways, Southern Region, Lecture & Debating Society was addressed on November 18 by Mr. Miles Beevor, Chief Secretary & Legal Adviser, British Transport Commission, who described the work of the Commission and its relations with the five Executives. He said that the Commission was working to weld the public transport services of Great Britain into a "single, live, and integrated whole," and that the Commission was more than a small policy-making body; it was responsible for the success of the largest commercial undertaking in the world. Mr. Miles Beevor paid a tribute to the late Lord Ashfield, who, he said, had had "a happy touch in his relations with his staff." The chair was taken by Mr. John Elliot, Chief Regional Officer.

Southern Region, who emphasised the unity of British Railways, saying: "Much as we love the Southern Region, we are now part of British Railways."

Mount Lyell Mining Railway.—The net profits of the Mount Lyell Mining Railway, Tasmania, for the year ended September 30, amounted to £105,734 against £117,737. It is proposed to pay a 5 per cent. dividend as last year.

Railway Students' Association.—Mr. H. F. Sanderson, Principal of British Railways Commercial School at Darlington, will read a paper entitled "Railway Education," before the Railway Students' Association, London School of Economics & Political Science, on December 14.

Steel Plant Furnaces in South Wales.—The Incandescent Heat Co. Ltd., Smethwick, is to provide furnaces and high nitrogen atmosphere plant to the value of £350,000 for the continuous wide strip mills of the Steel Company of Wales at its new Port Talbot works. The plant will be one of the largest in this country.

Greasing Equipment Contracts.—Orders have been received by Whitelegg & Rogers Limited, Grand Buildings, Trafalgar Square, London, W.C.2, from the Baldwin Locomotive Works, Philadelphia, U.S.A., the Montreal Locomotive Works, and the Canadian Locomotive Works for sets of Ajax greasing equipment for 200 "W.P." class 4-6-2 locomotives under construction for the Indian State Railways.

Bus Co-ordination Scheme for the North-East.—The Road Transport Executive announces that an invitation has been sent to local authorities in the North Eastern Area to attend a meeting at Newcastle-on-Tyne on December 21 to explore the possibility of preparing a scheme for the co-ordination of bus services in that area. The procedure is in accordance with the Transport Act, which lays down that in the consideration of such schemes, to be submitted to the Minister of Transport, account must be taken of any representation by local authorities.

British Plastics Certification Mark.—A further step in the practice of providing symbols of quality for industrial products is the introduction by the British Plastics Federation and the British Standards Institution of a certification mark for plastics and articles made from plastics. The object of the new scheme is to give purchasers an independent assurance that the materials and products thus marked conform to precise requirements laid down by an authority other than the producer. For the present the scheme is applicable only to moulding powders made from phenol-formaldehyde and urea-formaldehyde resins and certain mouldings made therefrom.

Tube Conditions Studied by Transport Chiefs.—On November 15, Sir Cyril Hurcomb, Chairman of the British Transport Commission, and Lord Latham, Chairman of London Transport, together with Lord Rusholme, Sir William Wood, and Mr. John Benstead, Members of the B.T.C., and Mr. A. B. Valentine, Member of the London Transport Executive, visited Holborn and Kings Cross tube stations to study the way in which rush-hour traffic is handled. At Holborn they saw some of the 11,000 people who pass through the station in one hour, and the methods by which 150 trains are run through the station to get them away. After seeing hundreds of passengers enter or leave a

OFFICIAL NOTICES

Government of Iraq

APPLICATIONS from qualified candidates are invited for the following post:—

LOCOMOTIVE DRAUGHTSMAN required by the Iraqi State Railways for a tour of 3 years in the first instance. Salary Iraq Dinars 60 a month plus high cost-of-living allowance of between I.D. 15 and I.D. 20 a month, according to dependants (I.D. 1 equals £1). Free passages. Provident fund. Candidates must have served an apprenticeship in the workshop of a British Railway or firm of Locomotive Builders and have a good knowledge of modern steam locomotive design and construction. A knowledge of diesel traction would be an advantage. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M/N/12841 (3B) on both letter and envelope.

WANTED.—*Railway Gazette*, 1926-32.—GILBERT, 30, Moor Lane, Bolsover, Derbyshire.

MANAGEMENT desire to thank all applicants for post advertised under Box Nos. 474 and 475 and intimate that the position is now filled.

ENGINEERS' BENCH VICES: 4½-in. jaw, with hardened steel plates, quick release action, cast-steel construction. New and unused—delivery from stock. Special prices quoted for quantities.—COX & DANKS LIMITED, Steel Dept., Broadheath, Near Manchester. Phone: Altrincham 3711/3.

IMPERIAL CHEMICAL INDUSTRIES LIMITED have a vacancy for a **RAILWAY SIDINGS DESIGNER DRAUGHTSMAN** at their Wilton Works, a large new factory being constructed on Tecs-side. Applicants should be experienced in preparation of schemes, drawings and Bills of Materials for large-scale factory railway sidings. Shop and field experience, including surveying, are essential, and general civil engineering knowledge an advantage. This advertisement is published by permission of the Ministry of Labour and National Service under the Control of Engagements Order, 1947.

Applications giving full details and quoting advertisement reference No. ICI/X/48/e should be addressed to the PERSONNEL MANAGER, IMPERIAL CHEMICAL INDUSTRIES LIMITED, Wilton Works, P.O. Box 54, Middlesbrough.

RAILWAY STORE METHODS. By W. H. Jarvis. Great Western Railway. The necessity for training officers—Organisation of stores department—Stores accounts. Cloth. 7½ in. by 5 in. 116 pp. With diagrams. 4s. By post 4s. 3d.

None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagements Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

CONSULTING Engineers, London, require fully qualified Mechanical Engineer capable of taking charge of inspection and advisory services. Experience in Rail Traction an advantage. Apply stating qualifications, age (not under 30 years), experience, and salary required, to Box 777, c/o DAWSONS, 129, Cannon Street, London, E.C.4.

8-TON capacity Tanyge Hydraulic Lifting Jacks. Complete with handles. Height of lift 13½ in., max. extension on head 40 in., max. extension on top 17 in. Total weight approx. 1 cwt. Unused. Ref.: SP 7730.—COX & DANKS LIMITED, Plant and Machinery Dept., Broadheath, Nr. Manchester. Phone: Altrincham 3711.

LARGE Midland Firm of Coachbuilders require Draughtsmen experienced in the design and construction of public service vehicles, both composite and all-metal. Please reply details of age, experience, and salary required to Box 491, T. & G., 101, St. Martin's Lane, London, W.C.2.

train in 30 seconds, they boarded a crowded Piccadilly Line train to Kings Cross, where they alighted and mingled with the home-going crowds. They were thus able to study the methods by which 130,000 travellers a day are handled and how some 200 trains are despatched on three lines between 5 and 6 p.m. (See illustrations on page 604).

Road Accidents in September, 1948.—The return issued by the Ministry of Transport of the number of persons reported to have died, or to have been injured, as a result of road accidents in Great Britain, during the month of September last, shows 395 deaths (compared with 523 in September, 1947), 2,789 seriously injured (compared with 3,603 in September, 1947), and 10,536 slightly injured (compared with 12,352).

Macrome High-Speed Steel Tools.—Prices of a series of standard and special high-speed steel tools made by Macrome Limited, Wolverhampton, including milling cutters, reamers, end mills and slitting saws, twist drills and centre drills, have been reduced as from November 1 by withdrawal of the plusage of 2½ per cent. It will be recalled that on May 1, 1948, as was reported in our issue of May 21, the plusage was reduced from 7½ to 2½ per cent.

Bengal-Nagpur Railway Co. Ltd.—A general meeting of the members of the Bengal-Nagpur Railway Co. Ltd. will be held at 132, Gresham House, Old Broad Street, E.C.2, on December 9, at 11 a.m., for the purpose of having an account laid before them by the liquidator showing the manner in which the winding-up of the company has been conducted, and its property disposed of, and of hearing any explanation which may be given by the liquidator.

Joint Iron Council to Oppose Steel Bill.—At the annual convention of the Joint Iron Council on November 17 the following resolution was passed unanimously:—"That this convention, which is fully representative of its constituent members, the Council of Iron Producers and the Council of Ironfoundry Associations, records its unqualified opposition to the policy of the Government as embodied in the Iron & Steel Bill. The convention appreciates that ironfoundries in general are not included in the third schedule of the Bill, but as it is clear that the production and distribution of all pig-iron

will be entirely at the discretion of the new Iron & Steel Corporation if the Bill becomes law, the convention is of the opinion that the maintenance and development of an efficient and free iron-foundry industry will be impossible under these conditions. The convention authorises its Executive to take all legitimate steps to defend and protect private enterprise throughout every section of the industry and in particular to secure the rejection of the Bill."

Derailed at Shap Summit.—When a number of goods wagons became derailed at Shap Summit on the night of November 20, the London Midland Region West Coast main line to Scotland was blocked for more than four hours.

Renaming of Stations.—British Railways, Eastern Region, announces that as from Wednesday, December 1, the Eastern Region passenger and goods station at Spalding will be renamed Spalding Town, and the former London Midland Region goods station, Spalding St. Johns.

Accident at Woolwich Arsenal Station.—When a train from Charing Cross to Dartford ran into the back of a Gravesend train which was stationary, at Woolwich Arsenal Station, Southern Region, on November 18, several compartments of the stationary train were wrecked, and it took over an hour to extricate the bodies of a motorman and a woman. The lines were cleared and normal services restored on the night of the same day.

American Railway Freight Rates.—It is reported that the Vice-President of the Association of American Railroads has told the Interstate Commerce Commission that railway companies in the United States will earn less than 3 per cent. on net investments next year unless freight rates are increased. As recorded in our November 12 issue, the companies have applied for an increase of 13 per cent. The increase, he added, would produce \$1,000 million in extra revenue, but he estimated that operation costs would increase by about \$4,000 million.

Racing Pigeon Traffic.—Restrictions imposed since 1938, on rail transport of racing pigeons, will be generally removed for the 1949 racing season. Racing pigeons for conveyance by passenger train, will be accepted by British Railways up to the limit of its resources, though during the holiday season some restriction may be

necessary at week-ends. Before the war, the railways ran special trains for racing pigeons and carried over 15,000,000 birds in a season; in some cases distances up to 700 miles were covered, including journeys on railway-owned ships. Railway staff have assisted in the release of the birds for over 50 years, recording the time, date and weather conditions when making the release.

David Brown & Sons: Bristol Office.—The Bristol office of David Brown & Sons (Huddersfield) Ltd. will in future cover only the South Western counties, its duties in the South Wales area having been transferred to the office at Prudential Buildings, Colmore Row, Birmingham. (Tel.: Colmore 4288.)

Silentbloc Limited Northern Headquarters.—Silentbloc Limited and its subsidiary company, Andre Rubber Co. Ltd., have opened Northern headquarters at 11, Cloth Hall Street, Huddersfield, under the management of Mr. H. Clements, assisted by Mr. K. Walker. The telephone number is Huddersfield 5491.

U.S.A. Railwaymen Laid Off.—Because of the dock strike at American east coast ports, about 1,000 railwaymen normally engaged in handling import and export goods on the New York Central System and the Central Railroad of New Jersey, were laid off work on November 17. Other railways stated that they would take similar action if the strike lasted long.

Dover-Dunkirk Ferry.—As a result of the Dunkirk dock strike, the Dover-Dunkirk train ferry was cancelled between Tuesday night, November 16, and Friday night, November 19, and an alternative service was operated by ordinary steamer between Dover and Calais. The usual night ferry train service was operated by the Southern Region, between Victoria and Dover, though on the French side the train was diverted to run between Paris and Calais.

Long Service Records of Yorkshire Firm.—The firm of British Belting & Asbestos Limited, Cleckheaton, Yorkshire, is proud of the service records of its employees, and each year the directors entertain members of the staff who have served for at least 25 years. There were 86 guests at the dinner held this year. It is the custom on these occasions to present every new member of the "Twenty-Fivers" with

a gold watch or some other article of equal value. The record for long service is held by Mr. A. A. Pearson, Chairman of Directors, whose association with the company began in 1890, while other members of the firm, with long service records are Mr. H. C. Gill and Mr. F. W. Cooley, both of whom started work with the firm in 1895.

Hungarian Locomotive Production.—Hungarian locomotive production in 1948 was almost nine times as great as in 1938 according to figures announced at the opening of a new locomotive workshop at the Mavag Iron Works in Budapest.

North Eastern Region Bridge Renewal.—The superstructure of bridge No. 43, which carries the South Shields line of the North Eastern Region of British Railways over King Street, South Shields, will be renewed shortly and a contract for the work has been placed with Wright, Anderson & Co. Ltd.

British Transport Commission Statistics.—It has been brought to our notice that in the summary of British Transport Commission *Transport Statistics* for the four-week period ended September 5, which appeared in our November 19 issue, the figures for ton-miles in table 3, Inland Waterways, should be shown as millions.

Forthcoming Meetings

November 26 (Fri.).—Institution of Railway Signal Engineers, at the London Transport Executive Signal School, Earls Court Station, S.W.5, at 6.15 p.m. "Single Line Control," by Mr. D. C. Doswell.

November 29 (Mon.).—Institution of Railway Signal Engineers, at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, London, W.C.2, at 6 p.m. Technical meeting: "The Labelling of Wires in Signalling Circuits," by Mr. Albert Barnes; Automatic Train Control—"The Link Between the Track and the Moving Train," by Mr. J. E. Mott; "Some Comments on the General Application of Signal Arm Proving," by Mr. F. W. Young.

November 30 (Tues.).—British Railways (Southern Region) Lecture and Debating Society, at the Social Club, East Croydon Station, at 6.30 p.m. "The G.W.R. System of Automatic Train Control," by Mr. A. W. J. Dymond.

December 1 (Wed.).—Institution of Railway Signal Engineers, at the Westinghouse Brake & Signal Co. Ltd., Chippenham, Wiltshire, at 7.30 p.m. "Single Line Control," by Mr. D. C. Doswell.

December 2 (Thurs.).—York Locomotive Society, at the Railway Institute, York, at 6.45 p.m. "A Western Region Driver's View Point," by Mr. John Drayton.

December 2 (Thurs.).—British Railways (Western Region) London Lecture and Debating Society in the Clerks' Dining Club, Bishop's Bridge Road, Paddington, at 5.45 p.m. Brains Trust: Questions on Railway Operating and Administration.

December 2 (Thurs.).—Stephenson Locomotive Society, at 32, Russell Road, Kensington, London, W.14, at 7 p.m. "The Beatties of Nine Elms," by Mr. C. Hamilton Ellis.

December 4 (Sat.).—Electric Railway Society, at the Fred Tallant Hall, Drummond Street, London, N.W.1, at 3 p.m. Annual General Meeting.

Railway Stock Market

Strength of British Funds has remained the outstanding feature of the stock markets, which were firm generally and somewhat more active, despite the millions of investment money absorbed by recent new issues. Transport 3 per cent. (1978-88) has reached the new high level of 101, with Transport (1968-73) at the new peak of 102½, while further gains also were established by 2½ per cent. Consols and Treasury Bonds. This week British Funds have continued to absorb a good volume of the business passing in markets. The view is growing, however, that the upward trend in this section must at least pause for the time being. Demand for good investments was illustrated by the very heavy oversubscriptions of the £1,500,000 offer of 3 per cent. debentures at £95 by British Aluminium.

Chief movement in foreign rails was a decline of over ten points in San Paulo to 160 as the statement at the meeting indicated that the final decision as to payment from Brazil for the "unrecognised" capital may not be possible for a long while. Leopoldina stocks have remained fairly active, the ordinary changing hands around 12½, with the preference at 36½, the 4 per cent. debentures 75½, and Leopoldina Terminal 5 per cent. debentures 71. Great Western of Brazil shares were around 107s., and less active than recently. Antofagasta were 10, and the preference stock 58, but United of Havana 1906 debentures eased further to 15½. In active dealings Beira Railway bearer shares encountered profit-taking and came back to 58s. Paraguay Central 6 per cent. prior lien debentures changed hands at over 40, and Costa Rica 6½ per cent. second debentures around 33, while B.A. Central 4½ per cent. first mortgage debentures were 46. In other directions Manila "A" debentures were 85 and the preference shares 9s. 3d. Mexican Railway 6 per cent. debentures firmed up to

84. Canadian Pacifics, after their recent rise, came back to 21½.

Road transport shares have not recovered from the sharp marking down which followed uncertainty as to B.T.C. intentions regarding minority shareholdings in the operating concerns whose large Tilling holdings have been acquired. Meanwhile, market view is that there seems every reason to assume that dividends of these operating concerns will be maintained, although it may be some while before British Transport decides on the question of an offer to the remaining shareholders. Thomas Tilling shares in contrast attracted renewed attention and rose to 122s. 6d.

Iron and steel shares, after earlier gains on the statement in regard to segregation of assets and the decision not to nationalise the non-steel interests of some firms, turned easier, although there was little selling in evidence. This decision has set a problem for markets because it is difficult to assess the position in relation to the estimated take-over value of iron and steel shares until there has been a final decision on the non-steel assets to be reprieved from nationalisation. Staveley rose to 92s. 3d. at one time, but later came back to 90s. 9d., and Guest Keen at 48s. 9d. also lost an earlier gain, as did Sheepbridge at 67s. A feature was an improvement in South Durham Steel ordinary and "B" ordinary shares to 34s. and 11s. 3d. respectively after the decision to increase the dividends. This is permitted by the Steel Bill because equity shares previously receiving less than 4 per cent. can have their dividend raised to this rate if profits permit.

Shares of locomotive building and engineering companies have been well maintained, Vulcan Foundry being 27s. 6d., Beyer Peacock close on 25s., and North British Locomotive 24s. 9d. Hurst Nelson marked 78s. 9d., and Wagon Repairs 5s. shares were 21s. 3d. Charles Roberts have been well maintained at £7½. Gloucester Wagon shares were 63s. 9d.

Traffic Table of Overseas and Foreign Railways

	Railways	Miles open	Week ended	Traffics for week		No. of week	Aggregate traffics to date	
				Total this year	inc. or dec. compared with 1946/47		Total	Increase or decrease
							1947/8	
South & Central America	Antofagasta...	811	14.11.48	£ 53,060	— £ 4,142	45	2,502,240	+ 504,618
	Bolivar ...	174	July, 1948	\$28,960	— \$69,357	30	\$471,287	— \$301,893
	Brazil ...	—	—	—	—	—	—	—
	Cent. Uruguay ...	970	6.11.48	32,712	+ 2,978	18	595,105	— 7,652
	Costa Rica ...	281	Sept., 1948	34,083	+ 4,533	13	111,619	+ 18,546
	Dorada ...	70	Sept., 1948	30,656	+ 456	39	240,485	— 33,615
	G.W. of Brazil ...	1,040	13.11.48	42,900	+ 600	45	1,482,100	— 25,700
	Inter. Ctl. Amer. ...	794	Sept., 1948	\$945,329	+ \$46,210	39	\$10,114,948	+ \$203,761
	La Guaira ...	22½	Oct., 1948	\$109,661	+ \$21,862	43	\$1,048,517	— \$27,377
	Leopoldina ...	1,920	13.11.48	55,730	+ 1,311	45	2,545,171	— 479,096
	Midland Uruguay ...	319	Sept., 1948	19,608	+ 3,123	12	67,355	+ 16,721
	Nitrate ...	382	15.11.48	12,298	+ 3,234	45	271,294	+ 77,060
	N.W. of Uruguay ...	113	Sept., 1948	5,686	— 1,213	12	16,335	+ 1,989
	Paraguay Cent. ...	274	12.11.48	\$98,354	+ \$26,240	19	\$1,915,281	+ \$755,324
	Peru Corp. ...	1,059	Oct., 1948	205,602	+ 27,225	17	753,073	+ 56,933
Canada	Salvador ...	100	Aug., 1948	c80,000	— c2,000	9	c165,000	+ c8,000
	San Paulo ...	153½	—	—	—	—	—	—
	Taltal ...	156	Oct., 1948	7,970	+ 115	17	31,730	+ 7,460
	United of Havana ...	1,301	6.11.48	44,831	— 8,126	18	793,547	+ 334,671
	Uruguay Northern	73	Sept., 1948	1,072	+ 52	12	3,308	+ 111
Various	Canadian National...	23,473	Aug., 1948	10,110,000	+ 855,250	35	77,676,250	+ 5,854,000
	Canadian Pacific ...	17,037	Sept., 1948	8,499,750	+ 1,556,500	39	63,896,750	+ 5,664,750
	Barsi Light† ...	202	Oct., 1948	26,610	+ 12,187	31	181,702	+ 7,717
	Beira ...	204	Aug., 1948	115,987	+ 2,924	47	1,287,270	+ 246,785
	Egyptian Delta ...	607	30.10.48	19,211	+ 1,455	26	328,731	+ 31,899
	Gold Coast ...	536	Sept., 1948	165,446	+ 21,792	26	1,185,462	+ 258,231
	Manila ...	—	—	—	—	—	—	—
	Mid. of W. Australia ...	277	Sept., 1948	29,589	+ 5,512	13	82,246	+ 16,684
	Nigeria ...	1,900	Aug., 1948	403,545	+ 97,720	21	2,205,705	+ 483,370
	Rhodesia ...	2,445	Sept., 1947	643,980	+ 102,833	52	6,787,603	+ 612,938
	South Africa ...	13,347	30.10.48	1,389,211	+ 126,917	31	40,532,744	+ 2,406,942
	Victoria ...	4,774	June, 1948	1,358,791	+ 248,144	52	—	—

† Receipts are calculated @ 1s. 6d. to the rupee